

# ***INDIAN INSTITUTE OF MANAGEMENT***

## ***REQUEST FOR PROPOSAL***

### ***IT BACKBONE, ACCESS CONTROL, & SURVEILLANCE SYSTEM (With Remote Monitoring, Maintenance and MIS Capabilities) at the permanent campus***



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KASHIPUR, BAZPUR ROAD,  
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# IT Backbone, Access Control & Surveillance System

## IA&S

### *IT Backbone, Access Control & Surveillance System with MIS and Remote Monitoring capabilities*

#### **BACKGROUND**

IIM Kashipur, through a detailed evaluation of the needs is envisaging to have a highly **modular, scalable** and **customizable** solution for the access control, security and surveillance requirements. Thereby, looking at an economical offering that is need specific and tailor made to their needs, yet, scalable and customizable as the project scale and nature evolves.

A key consideration, while developing the required components and solutions for such a system, will be to ensure that the Client be offered a system to serve the Client in astute monitoring of the Campus.

The bidder is required to have worked on solutions in various segments like **Construction Sites, Townships, Institutional Campuses, Industrial Units, personnel/people movement, zoning, scheduling, resource optimization/maximization, etc.** The following sections give a brief description of the various phases and applicable functionality/ modules that are available at the various phases.

In this connection, IIM KASHIPUR, invites you to submit your most competitive offer for supply, installation and commissioning of the above on a turnkey basis as per the details attached in the following sections of this document. You are requested to submit your most competitive offer giving technical details of the proposed system.

The bids for the required tender shall be submitted at the following address latest by the 19<sup>th</sup> of September 2015. All the requirements shall be prepared in separate covers as prescribed further in this document. The covers should clearly show the title and the content on each and enclosed in a common outer envelope. The outer envelope shall be clearly marked as "Offer for IA&S for IIM KASHIPUR" and clearly bearing the name and address of the bidder. The offers shall be submitted to the following address:

**Chief Engineer  
Indian Institute of Management Kashipur  
Bazpur Road, District Udham Singh Nagar,  
Kashipur, Uttarakhand - 244713**

Based on the details submitted by the bidders, IIM Kashipur shall shortlist the bidders to make a presentation on the technical features of their equipment at a venue and date intimated by IIM Kashipur.

**Authorized Signatory**

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Date of issue: 27<sup>th</sup> August' 2015

Sealed item rate tenders are invited by Chief Engineer on behalf of Director, Indian Institute of Management, Kashipur for the following Information Technology (IT) and surveillance system installation work from reputed and experienced bidders.

Name of Work	Amount of Estimate (Rs.)	Amount of Earnest Money Deposit (Rs.)	Time Allowed for Completion
IT Backbone, Access Control and Surveillance System (with remote monitoring, maintenance and MIS capabilities) at the permanent campus	4.71 crores	9.42 Lacs	6 months

Note: The time allowed for completion as shown in above table is from the issuance of letter of acceptance by IIM Kashipur and it includes the manpower / machinery mobilization time also.

1. The site for the work is available near Village Kundeshwari, Kashipur, District Udham Singh Nagar, Uttarakhand. The bidder is advised to visit the site of work, at its own cost, and examine it and its surroundings by himself, collect all information that he considers necessary for proper assessment of the prospective assignment. The bidder on its letterhead shall provide a declaration for having made a visit at site and has evaluated all its risks and cost associated with the work.
2. Further details of eligibility, mode of submission, etc., can be seen at <http://www.iimkashipur.ac.in/index.php/en/tenders>
3. Bidder shall download the Bid Document from the IIM Kashipur website and submit the non-refundable processing fee of **Rs. 5,000/- (rupees Five thousand only)** in the form of Demand Draft in favour of "Indian Institute of Management, Kashipur", payable at Kashipur along with the bid.
4. The bid shall be accompanied by a confirmation letter from the bidder confirming that the bidder satisfies all the eligibility requirements given in the tender document. If any misleading or false representation have been made, the bidder is liable to be disqualified without any implications over the Institute.
5. The Bid shall be accompanied by the earnest money as shown above in the form of Demand Draft issued by the Scheduled Bank in Favour of "Indian Institute of Management, Kashipur".
6. Each Bidder is requested to submit only one bid in the following three Envelopes.

**i. Envelope –I (Technical Bid)**

- a) Bid processing fee
- b) Earnest Money Deposit (EMD)

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- c) Technical qualification documents with filled-in forms in **original with its one copy** along with three nos. of compact Disc (CD /DVD)
- d) Complete tender document (Volume-I, Volume-II, Volume-III, Volume-IV) with un-priced bill of quantity, corrigendum, addendum, reply to bidder's queries (if any), duly signed and stamped by the bidders showing its acceptability towards it.
- e) Declaration for point no. 1 (visit made to site and evaluated all risks / cost) and 4 (confirming to all eligibility conditions) as shown above on its letter-head.

### ii. Envelope –II (Financial Bid)

Containing Bill of quantity with duly quoted rates for each item in **one original with its one copy. It should be submitted in hard and soft (excel format) in CD / DVD.**

It should be without any condition as conditional offers will be summarily rejected. Rates provided in hard copy duly signed and stamped shall prevail over rates provided in soft copy.

### iii. Envelope –III (Bid)

Containing envelope no. 1 and 2

The two envelopes (1 & 2) shall be kept in a 3<sup>rd</sup> sealed envelope duly marked with the Name of Bidder and mentioning the documents contained in each of the Envelopes 1 and 2. In case Envelope –I is not annexed or documents submitted in it is not found in proper form, the Bid shall not be evaluated.

- 7. Envelopes no. 3 & 1 will be opened on September 19<sup>th</sup>, 2015 at 11:30 a.m. Envelope No. 3 shall be opened in presence of those bidders who choose to be present on the date and time as intimated to all prospective bidders who are participating in bidding process. During the opening of envelope-1, the name of bidder who have submitted its offer along with details of EMD and bid processing fee will only be read out and NO other information / details whatsoever will be read out. The date of opening of envelope no. 2 shall be informed to all such bidders who are technically qualified.
- 8. Envelope no. 3 shall super-scribed with the name of work, name & phone nos. of bidder and due date of opening. The bids shall be received upto 11:00 am on September 19<sup>th</sup>, 2015 in the office of Chief Engineer (Projects), Indian Institute of Management, Kashipur. Those desirous of submitting the bid through post may do so subject to the condition that IIM Kashipur shall not be responsible for postal delay and bids received after 11:00 a.m on September 19<sup>th</sup>, 2015 will be treated as delayed and will not be entertained. All the bids received upto 11:00 a.m on September 19<sup>th</sup>, 2015 will be opened on the same day at 11:30 a.m in presence of bidder's authorised representative (maximum 2 nos. per bidder) whoever intends to attend.
- 9. Bids submitted in connection with notice will be treated confidential and will not be return under any circumstances.
- 10. Any queries related to this document may be submitted latest by September 8<sup>th</sup>, 2015 to Chief Engineer (Projects), Indian Institute of Management, Kashipur. The pre-bid meeting shall be held at the Institute on September 9<sup>th</sup>, 2015 at 11:00 a.m to resolve bidder's queries

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for which maximum two representatives per bidder is allowed to attend. In-addition, the reply to the queries shall be uploaded over the IIM website <http://www.iimkashipur.ac.in/index.php/en/tenders>

Bidders may request clarification, in writing (email or telephonic enquires will not be entertained), of the project requirement and bid document. IIM Kashipur reserves its right to not reply to any irrelevant query, as may deemed suitable by it.

11. Bidders are advised to keep visiting the IIM Kashipur's website from time to time (till the deadline for bid submission) for any updates in respect of the notice, if any. Failure to do so shall not absolve the bidder of his liabilities to submit the bid complete in all respect including updates thereof, if any. An incomplete bid may be liable for rejection.
12. This is a no deviation tender. Also, joint ventures and consortium are not allowed to bid.
13. The tender is made based on the clauses of the CPWD and the clauses given in the following document is applicable with latest amendments (issued till the date of bid submission):
  - a. General Conditions of Contract for Central PWD (CPWD) Works 2014
  - b. General Rules and Directions
  - c. Conditions of Contract
  - d. Integrity Pact
  - e. CPWD Safety Code
  - f. Model Rules
  - g. CPWD Contractor's Labour Regulations
  - h. Proforma of Registers

IIM Kashipur reserves the right to modify any of the Conditions or interpret them to suit to its specific requirements. In case of any discrepancy between CPWD clauses and clauses given in this document, the clauses given in this document shall prevail. Also, the decision of the Engineer-in-charge shall be final and binding upon all agencies.

14. The bidder should quote his rates in the Bill of Quantities. Rate should be expressed in figures as well as words.
15. Rates should be quoted both in figures and in words in columns specified. All erasures and alterations made while filling the tender must be attested by initials of the bidder. Overwriting of figures is not permitted and failure to comply with either of these conditions will render the tender void at the Institute's option. No advice of any change in rate or conditions after the opening of the tender will be entertained.
16. Each of the Bid documents should be signed by the person or persons submitting the bid in token of his/their having acquainted himself / themselves with the General Conditions of Contract, General Specifications, Special Conditions etc., as laid down. Any bid with any of the documents not so signed may be rejected
17. The rates quoted in the bid will not be altered by the contractor during the term of Contract.
18. Conditional bids are liable to be rejected. The bids shall also be rejected if not properly sealed.
19. The tender for the works shall remain open for acceptance for a period of 120 days from the date of opening of bids. The period may be extended by mutual agreement and the bidder

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shall not cancel or withdraw the bid during this period. If any bidder withdraws his bid before the said period or makes any modification in the terms and conditions of the tender conditions of the tender which are not acceptable to the institute, then the Institute shall without prejudice to any other right or remedy be at liberty to forfeit the Earnest Money Deposit.

20. On receipt of intimation from the Institute of the acceptance of his/their bid, the successful bidder shall be bound to implement the contract agreement within Twenty-one days thereof, the successful bidder shall sign the agreement in accordance with the draft agreement and the schedule of conditions but the written acceptance by the Indian Institute of Management of a bid will constitute a binding contract between the Indian Institute of Management and the person so bidding, whether such formal agreement is subsequently executed or not. The cost of necessary stamp paper for execution of the agreement shall be borne by successful bidder.
21. Work shall be done day and night without any extra charge, if necessary.
22. Contractor shall arrange for all temporary connections for water, electricity, sanitation facilities at his own cost at campus construction site.
23. Site order book with numbered pages shall be kept on site. Contractor shall carry out all instructions properly without extra charge.
24. This tender notice shall form part of the contract document. The bidder whose bid has been accepted by the competent authority hereinafter referred to as the “contractor” shall furnish the Performance Guarantee equal to 5 % of the tendered amount or higher (based on difference between estimated and quoted price) in the form of Bank Guarantee from any Nationalized or Schedule Commercial Bank issued in favour of Indian Institute of Management, Kashipur payable at Kashipur within fifteen days from the date of Letter of acceptance. If the successful bidder fails to furnish the performance guarantee, his Earnest money Deposit (EMD) shall be forfeited.
25. The Successful bidder shall furnish performance guarantee within Fifteen days and sign the Contract consisting of the Notice inviting tender, all the documents including general conditions, specifications and drawings if any, as issued at the time of invitation of tenders and acceptance thereof together with any correspondence leading thereto. If the successful bidder fail to sign the contract with in the stipulated period, his Earnest Money Deposit (EMD) shall be forfeited.
26. The successful bidder to whom the contract is awarded shall deposit as Initial Security Deposit by Demand Draft (payable at Kashipur) a sum to make of 2% of the value of accepted bid after the appropriation of the Earnest Money deposited by him. The successful bidder shall pay Initial Security Deposit within 15 days after receiving the letter of acceptance of this bid. Apart from the Initial Security Deposit to be made by the contractor as aforesaid, the Retention Money shall be deducted from the progressive running bill at 2.5% of the gross value of the work done and claimed in each running bill, provided that the Total Security Deposit i.e. Initial security Deposit + Retention amount shall both together not exceed 2.5% of the contract price or actual cost of work executed whichever is more, as determined after considering all variations as approved.
27. Payment shall be made to the contractor as per Clause 7 of the ‘clause of contract’ under “general conditions of contract for central PWD works”. For assistance of the contractor, payment summary is provided with the tender document.
28. **Method of Bid Submission**

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- a. If the bidder is proprietary firm, the bid shall be signed by the proprietor above his full typewritten name and full name of his firm with its current address.
  - b. If the bidder is a firm in partnership, the bid shall be signed by all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding power of attorney for the firm. In the latter case, a certified copy of the partnership deed and current address of all the partners of the firm shall accompany the bid.
  - c. If the bidder is a limited company, the bid shall be signed by a duly authorised person holding the power of attorney for signing the bid accompanied by a certified copy of the power of attorney. The bid shall also furnish a copy of the Memorandum & Articles of Association duly attested by a Public Notary.
29. Director, Kashipur reserves the right to accept or reject any bid, to annul the tendering process and reject all bids at any time, without assigning any reason or incurring any liability to the bidders.
30. In the event of contradictions, if any between specifications and codes and practice, the decision of the Director, IIM Kashipur shall be final and binding on the bidder.
31. The Board of Governors intend to award this tender to the lowest responsive bidder. However, the competent authority on behalf of Board of Governors of Institute does not bind himself to accept the lowest or any other bid, and reserves to himself the authority to reject any or all of the bids received without assigning of any reason. All bids in which any of prescribed condition are not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be, summarily, rejected.
32. The competent authority reserve to himself the right of accepting the whole or any part of the bid of distributing the work between one or more bidders and the bidder shall be bound to perform the same at the quoted rates.
33. The Schedule of Probable Quantities is liable to alterations by omissions, deductions or additions at the discretion of the Institute. Each bid should contain not only the rates but also the value of each item of work entered in a separate column and all the amounts quoted against various items should be totalled in order to show the aggregate value of the entire bid.
34. The rates quoted in the bid shall include all charges for clearing of site before commencement as well as after completion. The rates quoted shall be deemed to be for the finished work to be measured at site. The rates shall also be firm and shall not be subject to exchange variations, Labour conditions, fluctuations in railway freights or any conditions whatsoever. Bidders must include in their rates charges for packing & forwarding, loading / unloading at all locations (incl. of ports), transportation, sales tax, excise duty, octroi , sales tax on VAT, Service Tax and any other tax and duty or other levy levied by the central government or any State Government or local authority, if applicable. No claim in respect of sales tax, excise duty, Octroi or other tax, duty or levy whether existing or introduce in future shall be entertained by the Institute. Any liability of tax for payment made by Institute to the contractor or to its sub-contractor shall be in the scope of the contractor.
35. All statutory deductions shall be made by the Institute as per the prevalent central and state government norms.
36. The Contractor should note that unless otherwise stated the bid is strictly on item rate basis and his attention is drawn to the fact that rates for each and every item should be correct, workable and self supporting. The quantities in the Schedule of Quantities approximately

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indicate the total extent of work but may vary to any extent and may even be omitted thus altering the aggregate value of the Contract. Any quantity variation shall not result in any change in the item cost.

37. Time is the essence of the contract. Time allowed for carrying out the work is 6 (six) months and shall be strictly observed by the contractor.
38. The work shall throughout the stipulated period of the Contract be proceeded with all due diligence and if the Contractor fails to complete all the work within the specified period he shall be liable to pay compensation as per the Conditions of Contract/ work contract.
39. The contractor shall abide by the Minimum Wage Act, Labour Laws/Bye-laws, Shops & Establishment Act etc. of the State Government / Statutory bodies.
40. All necessary permit/license etc., if required, for the relevant work, has to be arranged by the contractor without any cost liability over the Institute.
41. IIM Kashipur reserves the right to verify the particulars furnished by the bidder independently. If any information furnished by the bidder is found incorrect at a later stage, it shall be debarred from tendering and taking up of any job in IIM Kashipur.
42. IIM Kashipur reserve the right to reject any or all prospective bids without assigning any reason and to restrict the list of technically qualified contractors to any number deemed suitable. Any bidder may enquire about its qualification status which may be informed to it after the completion of contractor selection procedure. However, IIM Kashipur is not bound to inform the bidder regarding the reason for its non-qualification or non-selection.
43. Even though a bidder may satisfy the eligibility requirements and has been qualified, he would be liable to disqualification if he has
  - a. Made misleading or false representation or deliberately suppressed any information in the forms, statements or enclosure required in the pre-qualification document.
  - b. Obscured / deliberately hidden record of poor performance such as abandoning work, not properly completing the contract, or financial failures/ weaknesses, etc.
  - c. Attempts to influence or promote his interests to the evaluation personnel / Committee in an unethical and unfair manner.
44. IIM Kashipur reserve the right, without being liable for any damage or obligation or informs the bidder, to
  - a. Amend the scope of work and or value of contract to the bidder.
  - b. Amend the time for execution of work.
  - c. Cancel the tender without giving any reason, if the cartel is suspected.
  - d. Reject any or all the bids without assigning any reason.
45. IIM Kashipur, in its sole discretion and without incurring any obligation or liability, reserve the right, at any time, to:
  - a. Suspend and /or cancel the Bidding Process and / or amend and / or supplement the Bidding Process or Modify the dates or other terms and conditions relating thereto;
  - b. Consult any bidder in order to receive clarification or further information;
  - c. Qualify or not to qualify any bidder and /or to consult any bidder in order to receive clarification or further information;
  - d. Retain any information and / or evidence submitted to the Authority by on behalf of, and /or in relation to any bidder; and /or



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- e. Independent verify, disqualify, reject and / or accept any and all submissions or other information and / or evidence submitted by or on behalf of any bidder.
  - f. Call for information from previous clients and evaluate the previous completed projects regarding all submission including litigations.
  - g. Undertake physical verification of completed projects and interact with clients.
  - h. Call for information from taxation authority or by financial auditor, banker, chartered accountant engaged by the bidder.
46. The Contractor shall not assign the Contract to subcontractor. He shall not sublet any portion of the Contract except with the written consent of the Institute may serve a notice in writing on the Contractor rescinding the contract whereupon the security deposit shall stand forfeited to the Institute, without prejudice to his other remedies against the Contractor.
47. The Contractor shall carry out all the work strictly in accordance with specifications, details and instructions of Institute's Campus Designer / Project Management Consultant / representatives. If in the opinion of the Institute's Representative, changes have to be made in the design and with the prior approval in writing of the Institute, they desire the Contractor to carry out the same, the Contractor shall carry out the same without any extra charge.
48. The successful bidder must co-operate with the other contractors appointed by the Institute so that the work shall proceed smoothly with the least possible delay and to the satisfaction of the Institute. It shall not hire the manpower of the other contractors that have been engaged by the Institute.
49. IIM have already engaged an agency for general construction works at site. The contractor has to ensure that all work is carried out at site in the smooth manner as per the instructions of the Engineer-in-charge. The labour of the contractor shall not move in the area of the other contractor(s). If any incident of theft or burglary has been brought to the notice of Engineer-in-charge, the contractor shall be liable to pay the amount related to theft / burglary which may be deducted from its running account bills and the contractor shall not object to it.
50. It shall be deemed that by submitting the bid, the bidders agrees and releases the Authority, its employee, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and /or performance of any obligations hereunder and the bidding process, to the fullest extent permitted by applicable law, and waives any and all rights and /or claims it may have in this respect, whether actual or contingent, whether present or in future.
51. Disputes, if any, will be subject to Kashipur (Uttarakhand) jurisdiction only.
52. The bid must be filled in English and all entries must be made by hand and written in ink. All the pages of the bid document are to be signed and stamped by the bidder. If any of the documents is missing or unsigned, the bid may be considered invalid by the Institute representative at its discretion. From the designated members, email shall be the accepted mode of communication between the contractor and Engineer-in-charge (or its authorized representatives) during the bidding and contract execution.

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**Time Schedule:**

A.	Availability of Tender Document on IIM web-site	27.08.2015(Thursday) 10:00 am to 18.09.2015(Friday) 11:00 pm at IIM Kashipur website at URL <a href="http://www.iimkashipur.ac.in/en/tenders">http://www.iimkashipur.ac.in/en/tenders</a>
B.	Last date of sending Queries / Clarifications by Bidders	08.09.2015(Tuesday) 5:00 pm at the office of Chief Engineer(Projects), IIM-Kashipur
C.	Tentative Date of Pre-Bid Meeting	09.09.2015(Wednesday) at 11.00 am in the office of Chief Engineer (Projects), IIM Kashipur, Bazpur Road, District Udham Singh Nagar, Uttarakhand.
D.	Tentative Date of Reply of Queries by IIM	11.09.2015(Friday)
E.	Last Date and Time of Submission of Bid Document	19.09.2015(Saturday) upto 11:00am at the office of Chief Engineer (Projects), IIM Kashipur, Bazpur Road, District Udham Singh Nagar, Uttarakhand - 244713
F.	Date and Time of Opening of Envelope No. 3 & 1	19.09.2015(Saturday) at 11:30am in the office of IIM Kashipur, Bazpur Road, District Udham Singh Nagar, Uttarakhand.
G.	Date & Time of opening of Envelop No. 2 (Financial proposal)	Will be intimated later only to the technically qualified bidders.

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## **1. INDICATIVE SCOPE OF WORK**

### **A. Overview**

The operation of the proposed system shall address four aspects of the access control for the campus, namely:

- a. Personnel Access Control
- b. Vehicular Access Control
- c. Video surveillance of the common areas within the campus
- d. Periphery surveillance and monitoring

The campus comprises of three scheduled entrance/access points. Two of these are to the main campus area while a third provide access to the campus annex.

A record of all personnel as well vehicles accessing the campus shall be maintained along with a count of entries, exits and on-campus population. Once granted entry, no other controlled access tools are to be provided for further access to the various buildings/zones/facilities within the campus other than a bio-metric recording system for recording facility usage/attendance.

A brief note on the various access control levels is mentioned in brief here in below:

#### **a. Personnel Access**

The premises has three access gates. Pedestrians can access the campus through one of the three access gates to enter or exit from any of the gates through turnstiles placed at the Guard Houses at these gates. The turnstiles shall only offer either entry or exit from the campus. The left side guard house shall be used as the access, by default.

All gates shall have the basic components for (A) personnel access and (B) vehicular access. The personnel access shall be through the turnstiles comprising of the turnstile, a smart card/biometric reader and a dome camera.

#### **b. Vehicular Access**

Vehicles can access the campus through one of the three access gates to enter or exit from any of the gates through barrier gates placed adjacent to the Guard Houses at these gates. The boom barrier shall only offer either entry or exit from the campus. The left side boom barrier gate shall be used as the access, by default.

All gates shall have the basic components for (A) personnel access and (B) vehicular access. The vehicular access shall be through the boom barrier gates comprising of the boom barrier, an RFID tag reader and a camera for capturing the vehicle as well as the driver's images.

#### **c. Video surveillance of the common areas within the campus**

The video surveillance of the common areas within the campus shall be achieved through pan-tilt-zoom cameras that shall have a minimum range of about 20 meters and extendable upto 100meters. The cameras shall provide manual panning of the area to be kept under surveillance.

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The video from all such cameras are to be viewable individually and shall be available as a record for retrieval, viewing and reproduction, should it be needed at a later date. The supplier may suggest a suitable video format and required hardware for the recording, storage and playback of such video files. The system shall also be capable of providing still images of any specific sections of the video should it be required.

### **d. Periphery surveillance and monitoring**

The periphery surveillance and monitoring is to be done across the external boundary of the campus. Such surveillance shall be provided pan-tilt-zoom cameras as well which shall provide a visual range of about 500-600 meters. The cameras shall have the capability of working in low-light conditions. The cameras shall be capable of working in no-light conditions as well, either through in-built or external infrared illumination.

The periphery monitoring cameras should also be capable of providing zoom capabilities with reasonable resolution to be able to provide acceptable detailing in order to identify the object form for the security or related personnel to identify the animation level of the object and the threat posed by such object/s.

The periphery monitoring should include sufficient number of cameras to ensure that every meter of the periphery is sufficiently visible through a network of such surveillance cameras and any potential blind spots that may harbor threats are avoided as best as possible.

The video from all such cameras are to be viewable individually and shall be available as a record for retrieval, viewing and reproduction, should it be needed at a later date. The supplier may suggest a suitable video format and required hardware for the recording, storage and playback of such video files. The system shall also be capable of providing still images of any specific sections of the video should it be required.

## **B. KEY FUNCTIONALITY/IES**

The system is broadly required, in terms of application, for the control of access to the campus as well as offering visual monitoring capability for the identified locations within and along the campus. The system shall, as a result, be able to provide information in the form of visual data and report/s as required for the said application.

IA&S as a system for the purposes of this Project, shall be offering only solutions for the post-commissioning phase. The key functionalities listed for the purpose are:

### **a. Modules/Functionalities**

- i. Security Control Centre
- ii. Pre-clearance and Authorization
- iii. Screening and Access Control
- iv. Intrusion/Trespass Alerts
- v. Customized MIS

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## C. FUNCTIONALITIES

In order to arrive at the potential solution for the proposed campus at IIM, Kashipur, a broad set of assumptions have been considered for the proposed estimate of the solution that is required for the access control and monitoring of the campus.

### Base Functionalities

- a. We are envisaging a system that has the following 4 broad areas:
  - 1. Personnel access control;
  - 2. Vehicular access control;
  - 3. Video surveillance system / camera network with an independent server and control centre;
  - 4. Peripheral/boundary surveillance/monitoring (especially for breaches).
  
- b. The area is subject to dense fog during the winter months lasting between 2 to 3 months in a year, besides heavy rains during monsoons. This is an important consideration while looking for the right camera solutions for the purpose. Also, the Client would like to ensure that the Cameras are activated on demand. This would be worthwhile considering the contribution to the carbon footprint of the solution.
  
- c. In terms of integration, if a camera subsystem will be required for the IA&S solution that we are proposing then this will be integrated as part of the overall system, by the BMS supplier. This could also be a standalone system. However, this would need to be integrated as part of the system if the recall and reporting of the various instances would be part of our overall offering of IA&S.
  
- d. The campus has of 3 Groups of access:
  - 1. 3 major access points in the campus (Gates) to the campus, with one entry and one exit gate at Gate 1 and Gate 4, while a single entry and exit for the gates 2 and gate 3
  - 2. 13+ major access points to various sections within the campus.
  - 3. 108+ entrances to individual buildings within these sections.
  
- e. The campus will have a mix of motorized as well as non-motorized means of transportation ranging from 2-wheeled bi-cycles, motorbikes/scooters to 4-wheelers and multi-axle buses and trucks. Hence, for the access to the campus from the gate, there is a split gate for personnel and 2-wheeled + 4-wheeled vehicles, respectively.
  
- f. For the main entrances in Group 1 above, the following components need to be considered:
  - 1.1 Gate: Boom Barriers for 2-wheeler and 4 wheeler entrance gates and Turnstiles for Personnel access. The data from all the gates must be integrated.
  - 1.2 RFID for Vehicular Access (One reader for each of the turnstiles, 2W gate and 4W gate).
  - 1.3 Cameras: 1 Pan/Tilt/Zoom (PTZ) camera for area monitoring; 1 Directional/Bullet Camera each for the 2W and 4W entry/exit for vehicle and occupant images; 1 Dome camera for Guard Room; 1Dome Camera for personnel access turnstile;
  - 1.4 Display (LED Displays or LED TV/Monitors) in each Guard House for visual monitoring
  - 1.5 Motion detector to activate the readers and other devices at the entry/exit.
  - 1.6 Loop/s (Vehicle Count)
  - 1.7 Biometric Fingerprint Scanner/s: 1+1 (IN+OUT) at each turnstile; 1+1 (IN+OUT) at each guard room and 1+1 (IN+OUT) at Control Room

## IT Backbone, Access Control & Surveillance System

### 1.8 Operator Console (Desktop Computer)

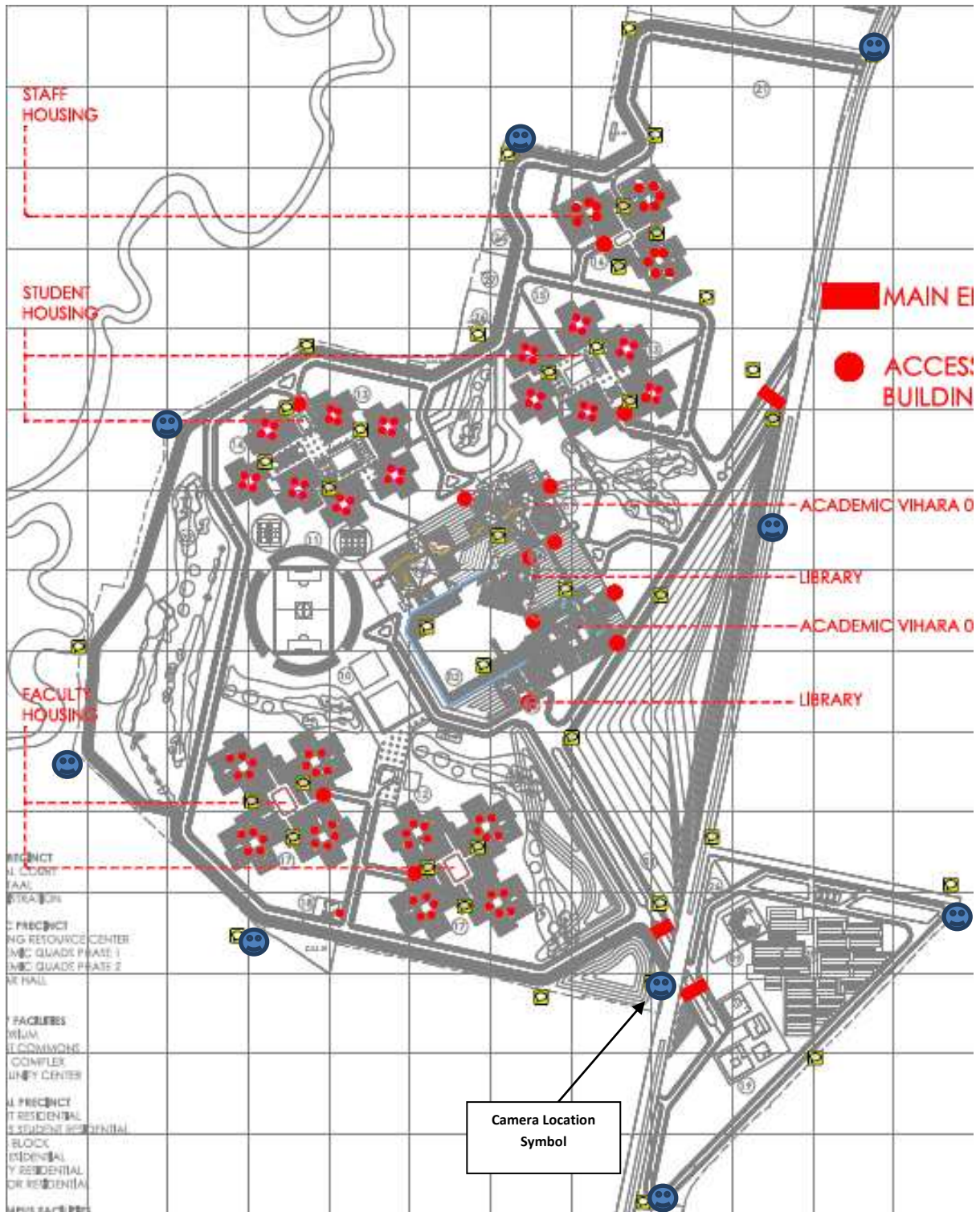
For the entrances in Group 2 above, the following components need to be considered:

### 1.9 PTZ camera

- g.** There would be 10 potential locations considering a visual range of 600 meters per camera including IR based night vision and avoiding potential 'blind spots' in the periphery. Each such location shall have PTZ cameras, of reasonable resolution and optical zoom capability to cover a straight-line distance of atleast 600 meters. These cameras shall be pole mounted on the inside of the boundary wall using a pole at a minimum height of about 8 meters, with all the cables (power + data) concealed on the inside of the pole or as best suited to avoid tampering. The cameras need to be provided suitable IP rated housing/enclosure for securing from the elements and vandal-proofed as best possible. Each set of such cameras shall be provided with their own set of independent 0.5 - 1.0 KVA uninterrupted power supply solution, depending on the camera opted for.
- h.** A report of all vehicles and personnel (Including required details of Authorized vehicles / personnel) accessing the campus on any given day will be provided along with the relevant count of 'on-campus' at the time of the report generation. At an evolved stage, the system should be able to provide the estimated location/zone within the campus where each such asset (personnel/vehicle) is at should be possible to identify. However, should this require an additional number of components like readers/sensors controllers with a suitable level of intelligence built into the controller/component firmware as well as the application software for the solution, such additional solution should be made available at a later date upon request. Further details of the reporting requirements are listed further in this document.
- i.** All accessories required for the installation of the components in the system should be included in the supply of the components and costs to be considered accordingly. The network components required for the camera subsystems shall be provided by the Client. Details to this effect are available further in this document.
- j. Additional Notes**
  - 1 No barrier gates/access control system is required along the road/pathways within the campus
  - 2 RFID based system used to allow access to personnel within the campus
  - 3 Does not include any communication/networking infrastructure
  - 4 None of the Access Controlled Buildings/Facilities are monitored by the supplied system and these shall form part of the BMS system.

The following is an indication of the estimated camera locations inside and along the periphery of the campus:

# IT Backbone, Access Control & Surveillance System



## IT Backbone, Access Control & Surveillance System

### D COMPONENTS

The following is a brief list of various components that are considered for the proposed system.

S.No.	Component	Remarks
1	Induction Loops	2 Loops for each 2W and 4W entry/exit
2	Controller Consoles	<i>Depending on the system being offered</i>
3	Barrier Gates	Includes one turnstile and one barrier gates at each entry/exit
4	LED Display	Includes one monitor at each gate and 3 in control room
5	RFID Reader	Includes a reader at all barrier gates plus guard rooms and Control room
6	Cameras (Bullet type)	Entry/Exit
7	Camera (Dome type)	People access + Guard Rooms + Control Room
8	Camera (PTZ type)	Monitoring of periphery and internal public spaces
9	Biometric Fingerprint Scanner	1 in and 1 out at each turnstile and guard room plus IN + OUT at Control Room
10	UPS (1 KVA)	For peripheral monitoring cameras
11	UPS (5 KVA)	For main gates and control room
12	IA&SLicense	Annual renewable support license after first 2 years
13	Servers	1 Controller Manager + 1 AV Server + 1 Data Server
14	Workstations	1 Video Controller + 1 AVI at each gate
15	Software Licenses	Includes licenses for Windows desktops, Windows Servers, DBMS, IA&S.
16	Poles	Poles for peripheral + PTZ Cameras and RFID Readers

Detailed specifications of the various components are enclosed in ANNEXURE A towards the end of this document.



# IT Backbone, Access Control & Surveillance System

## 2. OPERATIONS MANAGEMENT

The 'Operations Management' of IA&System is usually divided along functional lines: level management, enforcement operations, reporting, ongoing project management, core IT facilities, process and property security, and administration. Following services shall be provided by the bidder:

### 2.1 Services and Description

Service	Description
1. Tag issue and management services	(i) Tag issue Services at the guard house/s including the processes of user registration and affixing the Tag on the customer's vehicle and/or card initialisation (ii) Tag account monitoring (iii) Routine updation of available tags and providing blacklists and whitelists for tag management.
2. Transaction information services	Sending transaction messages to server/s and/or relevant reports including alerts for invalid or unauthorised tags used for access.
3. Core Services	(i) General Systems Monitoring, Network Status Monitoring & Health checks (ii) Ensuring Data Availability from various access levels (iii) Archiving (iv) Maintenance Services (v) Databases management
5. Management Information system (MIS)	(i) Periodic management reports including, access details at and between various access levels (ii) Reporting on Performance based key functional parameters (iii) Analytics Reports where applicable
6. Technical Help desk	Providing information for resolving technical issues pertaining to the IA&S like security service providers (and their staff like maintenance personnel) and other operations and maintenance staff.

### 2.2 Roll Out and Operations

**2.2.1** In this phase the Bidder shall be responsible for implementation and roll out of the IA&S system developed in this phase. The bidder would operate the IA&S by providing the following services:

- (a) Interface the IA&S Application with each IA&S enabled level within the campus that gets integrated into the IA&S programme/system.
- (b) Providing necessary on-going training to operations and maintenance personnel at all locations to meet SLA requirements (as applicable)
- (c) Ongoing administration and maintenance requirements:

## IT Backbone, Access Control & Surveillance System

- I. Operational support
  - II. Maintenance of Solutions
  - III. AMC administration
  - IV. MIS Reports and incident reporting
- (d) Customer Care services (Functional and Technical Helpdesk)

**2.2.2** The Bidder will be responsible for the generation and submission of necessary documentation required in this phase as specified by the relevant competent authority, where applicable. Review and approval of CLIENT is required on all such documentation before commencement of activity.

**2.2.3** The Bidder shall document the baseline configurations for all application equipment & facilities and get it approved from CLIENT prior to commencement of installation. The Bidder shall develop and implement a system to maintain these configurations and ensure adequate controls for change management process on an ongoing basis.

**2.2.4** IA&S bidder should provide a single user license in the name of the CLIENT for the various tools used by the bidder during the development phase of respective solutions. These tools would typically include Application Development Framework/ Environment for custom built and commercially of the shelf (COTS) based products, PDF Designer, Database Schema Designer, Help authoring tool etc.

**2.2.5** Any additional components, sub-components, assemblies, sub-assemblies that would be required to meet the desired performance requirements will have to be provisioned by the bidder at no additional cost to CLIENT without any project delays, unless such additional costs are duly approved by the CLIENT prior to the installation/commencement of such work/s.

**2.2.6** The Bidder should arrange for necessary tools for application performance monitoring and reporting to deliver the complete software development and maintenance services.

**2.2.7** The Bidder shall develop Information Security Policies and Procedures for CLIENT based on ISO/IEC 27002:2005 Code of practice. This shall be approved by CLIENT before being implemented. The indicative list of mentioned domains as per ISO/IEC 27002:2005:

- a. Security Policy
- b. Asset Management
- c. Human Resources Security
- d. Physical & Environmental Security
- e. Communications & Operations Management
- f. Backup & Recovery
- g. Access Control
- h. Information system acquisition, development and maintenance
- i. Incident Management
- j. Business Continuity Management

### **2.3. Scope of Work**

Each of the above services in all the phases has now been explained below.

## **IT Backbone, Access Control & Surveillance System**

### **2.3.1 Project Planning and Monitoring**

- a. The Bidder is expected to adopt a comprehensive and efficient Project Management methodology to ensure that project milestones are tracked and met. The Bidder will be required to finalize the Project plan in order to determine and agree on the project expectations, ground rules, work plan, communication matrix, timelines, Quality Plan within 15 days of issue of Letter of Intent (LOI) / Letter of Acceptance (LOA) by CLIENT.
- b. The detailed project plan shall clearly specify the various project milestones and project deliverable schedules. It shall also include the following:
  - I. Project Organization plan
  - II. Software Design and Development plan
  - III. Implementation plan and timelines for each activity
  - IV. Pre-commissioning, Operational and User Acceptance Testing Plan
  - V. Design, Delivery and Installation Plan for Hardware
  - VI. Training Plan
  - VII. Technical Support Plan
  - VIII. Technical and Operational Process which must include (but not limited to) detailing on Methods, Tools, Techniques included in the IA&S.
- c. The detailed project plan shall clearly specify the various project milestones and project deliverable schedules. However key timelines are as under:
  - I. Fibre optic cable laying to be completed within 2 months of LOI / LOA
  - II. Camera installation and connection to be completed by end of April'2016
  - III. Satisfactory Commissioning of all systems to be completed by end of May'2016
  - IV. Additional timelines to be provided by bidder as per the Institute requirement and shall be approved by the Engineer-in-charge of CLIENT within 15 days of the issue of LOI / LOA.

### **2.3.2 Application Customization & Software License – Terms & Conditions**

#### **2.3.2.1 General**

- a. The Bidder shall provide the information about the software media and licenses for all third party software packages and products. The Bidder shall be the author of the application software that shall be the core operating application as part of the integration activity for the various components in the IA&S system.
- b. IA&S application shall be developed and implemented with the interfaces that work on reliable and proven technologies which may be proprietary and preferably open source technologies and software. IA&S application shall be designed based on industry practiced software engineering methods and established guidelines.
- c. The solution shall allow, in future, the adding of new functionalities, components, service providers or operators to the system that may or may not require some sort of modification work to IA&S software. The bidder shall inform and demonstrate this during System Integration Testing (SIT).
- d. The solution should have the capability of being web-based so as to be accessible for all stakeholders on the World Wide Web and for internal employees on the intranet. Such a capability may be required by the CLIENT to be implemented at a later date.

## **IT Backbone, Access Control & Surveillance System**

### **2.3.2.2 Develop the following interfaces:**

- a. Interface to Server for periodic transaction data refresh/ sync
- b. Interface to CLIENT Application for Building/Facility Management, if required.

### **2.3.3 System Test Planning & Testing**

Under the Testing stage, the Bidder shall carryout Integration as well as System Testing as per the agreed test plans, as applicable. The following sections indicate the scope of each phase the Bidder is expected to perform.

- a. The Bidder shall plan out a series of different tests, each test having a different purpose, to verify that all system elements have been properly integrated and that the system performs all its functions and satisfies all its non-functional requirements. Following tests need to be covered:
  - I. Test Case Design & Test Script Development for IA&S functional testing
  - II. Facility Access Cycle test to establish effective operation of the end-to-end facility access and reporting regime, including interfaces to external agencies, if any
  - III. High Volume performance testing
  - IV. Failure mode and anomalous behaviour tests
  - V. Integration Testing
- b. As part of the system testing, the Bidder shall carry out Performance testing of the application to ensure that the application meets the performance requirements identified in the SRS.
- c. The Bidder shall maintain the system test plan and test results with defect statistics and provide the same to the concerned officers of the CLIENT.

### **2.3.4 User Acceptance Testing (UAT)**

User Acceptance consists of formal testing conducted by the end user group according to the acceptance test plan and analysis of the test results to determine whether the system satisfies its acceptance criteria.

- a. The Bidder shall prepare a plan to coordinate the User Acceptance activity.
- b. The Bidder shall provide the necessary infrastructure like servers, storage, database licenses, development and run-time licenses for solutions proposed, etc. for the User Acceptance Testing environment.
- c. The Bidder shall set up the test environment along with installation of the software and test data creation, as applicable.
- d. The Bidder shall provide support to document the User Acceptance Test Results along with Defects Statistics. The Bidder shall ensure that defects found are corrected and is retested by the end user group.
- e. On successful completion of User Acceptance Testing, the Bidder shall obtain a formal acceptance sign-off from the Engineer.

## **IT Backbone, Access Control & Surveillance System**

### **2.3.5 User Training**

- a. As per the User Training Plan, the Bidder shall prepare the Training Manuals and submit the same to CLIENT for review and approval.
- b. The Bidder shall ensure necessary environment setup, data creation to conduct end user training. End user training shall include application related training, training on handheld devices, etc. End user training will be conducted in a centralized location or at distributor location as identified by the Engineer.
- c. The Bidder shall prepare the solution specific Training Manuals and submit the same to all three to the Engineer for review and approval.
- d. The Bidder shall impart training related to administration and maintenance to technical users of CLIENT. The knowledge transfer shall include initial and ongoing training and skills development, training materials, operations manuals, procedure manuals and deployment/ installation guide as mentioned under technical documentation.
- e. The Bidder shall ensure necessary environment setup, data creation to conduct end user training. CLIENT shall provide the necessary infrastructure such as training classrooms to conduct the end user training. The training environment that is different from the production environment shall be used for conducting the training sessions.

### **2.3.6 Application Rollout**

- a. The Bidder, in coordination with CLIENT, shall prepare setting up the production environment, installation of the application in the production environment, setting-up of application database, configuration of application user profiles, etc.
- b. The Bidder shall ensure necessary support is provided to resolve defects, as applicable. The Bidder shall document the defects/ bugs encountered during this phase as well as document the resolution of the same.
- c. The Bidder shall also prepare and maintain a database of Consolidated List of Common Errors & their Resolution.

### **2.3.7 Preparation of Technical and End-User Documents**

The Bidder is expected to prepare technical documents including but not limited to:

- a. Inception Report containing the project plan
- b. Software Requirement Specifications Document (SRS)
- c. Operational Procedures Manual
- d. Roll Out Completion Report
- e. Exit Management Plan at the end of the contract period.
- f. Preparation and maintenance of end-user documents including but not limited to user manuals. The manuals and documents shall be in English and in soft copy and equal to the number of the deliverables. Some of the user manuals are:
  - I. Operations Manual providing instructions for installing the application, troubleshooting, interpreting message logs, and FAQs (Frequently Asked Questions).
  - II. Maintenance Manuals
  - III. Administration Manual
  - IV. Installation and maintenance manual for the servers and other hardware
  - V. Trouble Shooting Guide/ Handbook for helpdesk which describes the various trouble shooting methods

## **IT Backbone, Access Control & Surveillance System**

### **2.3.8 Installation, Commissioning and Rollout of Hardware**

The Bidder would be responsible for complete installation of all hardware as mentioned in this RFP with following specific requirements:-

- a. The Bidder shall ensure standardization at unit building blocks. The Bidder shall design the overall solution such that the variety of server models in the entire architecture is minimized in order to improve the management of the overall solution.
- b. The Bidder shall offer latest and proven technologies that are available for items including but not limited to Processor model with required clock speed, I/O, Memory, Cache, Security products, etc.
- c. General Requirements of Servers
  - I. The servers shall be sized by the Bidder independently considering the business requirements and workload details provided.
  - II. The Bidder shall provide requisite licenses for all the software required for the respective servers including, but not limited to, Operating System, respective software, database and application, etc.

### **2.3.9 Ongoing Administration and Maintenance requirements**

#### **2.3.9.1 Control Centre Operations**

1. The Bidder shall provide necessary training to the skilled and experienced manpower, for administration and management of the Control Centre, as provided by the CLIENT during the contract period.
2. Co-ordinate with the Data Centre Provider to resolve any problems and issues related to the Control Centre.
3. Prepare a list of equipment, software and configuration installed in the Control Centre.
4. Manage an inventory of critical components and spares that are provisioned onsite and co-ordinate with the OEM to ensure replenishment of the same whenever required.
5. Provide a monthly back of the entire database in a suitable electronic format to CLIENT.

#### **2.3.9.2 Warranty and AMC Administration**

- a. The Bidder should ensure availability of Warranty and Annual Maintenance Contract (AMC) support with all the OEMs for proposed software and hardware components. This Warranty and AMC support period should commence from the deployment of software and hardware components till the end of the period of contract.
- b. The Bidder should track the Warranty and AMC for all the assets at the office locations and DC/DR and initiate procedure for renewal of the same at appropriate points in time.
- c. All products, softwares, licenses purchased by the bidder shall be in the name of CLIENT.

### **2.3.10 O&M related Reports and Incident Reporting**

The Bidder shall also draw an exhaustive list of reports along with CLIENT. Indicative reports are:-

- a. Summary of component wise uptime, wherever possible.
- b. Log of preventive/ break-fix maintenance undertaken.
- c. Summary of changes undertaken in all Control Centres including major changes like configuration changes, release of patches, database reorganization, storage

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- reorganization, etc. and minor changes like log truncation, volume expansion, user creation, user password reset, etc.
- d. Summary of incidents reported like Application down, Components down, overall downtime, security vulnerabilities detected, hacker attacks/ security threats, peaking of utilization, etc.
  - e. Inventory of spare parts and consumables
  - f. Bug/ defect resolution reports including the analysis of bugs/ defects resolved, pending, completion time, responsiveness, concern areas, etc.
  - g. Change Request Logs with their resolution status
  - h. Incident Reporting (as and when it occurs)
    - I. Complete system down – with root cause analysis
    - II. Peaking of resource utilization on any component
    - III. Bottlenecks observed in the system and the possible solutions and workarounds.
  - i. Security Incident Reporting (as and when it occurs)
    - I. Detection of security vulnerability detection with the available solutions/ workarounds for fixing

### **2.3.11 Transaction Management**

- a. The Bidder shall design and propose the format and content of the transaction files including protocol to ensure that there is no loss of data during transfer and recovery of data.
- b. The system shall validate each transaction to ensure its validity, authenticity and accuracy. The validations to be performed shall be determined during requirements and design phase.

### **2.3.12 Tag Management**

The Tag Management module should meet the following minimum functional requirements but not limited to.

- a. It shall contain the master database of all RFID Tags present in IA&S program. Each IA&SRFID Tag Smart Card will have a unique identity.
- b. It shall facilitate stock management of RFID Tags throughout their lifecycle from the point the Smart Cards are procured, till the point they are disposed of/removed from active service. It shall monitor, update and report Tag stocks at various locations and in various stages time to time.
- c. It shall facilitate tracking of Tags throughout their lifecycle including initialized, issued, active, defective/ damaged, dormant (removed from active list), hot-listed, disposed of, etc.
- d. It shall interact with the inventory module of the solution.
- e. The IA&S System shall facilitate replacement of Tags .
- f. All transactions for each Tag will be stored, in active database as per the financial regulations of the government.
- g. The System shall allow retiring Tags on prolonged non-use in accordance with the business rules.
- h. The System shall be able to detect and report anomalies in use of Tags.

### **2.3.13 Report Management**

One of the main objectives of the IA&S System is to provide the management with a range of detailed reports. The reports will include standard reports, exception reports and Management

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Information System reports. The report specifications document shall include but not be limited to data sources, measurement metrics and anticipated reliability for all reports and submitted to CLIENT for review and approval. The main categories of reports will include:

- a. Performance Reports
- b. Alarm and Downtime Reports
- c. Stock Inventory Reports such as Tag Allocation, stock distribution, Issued tags, ,
- d. Log Reports
- e. Exception Reports (Invalid transaction, Malfunctioned Tag, etc.)
- f. Version Update Reports

The Report Management Module shall meet the following functional requirements:

- a. It is possible to generate reports daily, weekly, monthly, or on ad-hoc basis.
- b. It is possible to generate consolidated reports as well as separate reports for different modes and non-transit applications.
- c. It is possible to access reports on computers connected to the Central System over a secure network.
- d. The users will be able to view or print reports (based on their roles and rights) as well as download reports in pdf and spreadsheet formats.

### 2.4 Transaction Generation, Processing & Settlement

#### 2.4.1 Transaction Generation overview

- a. Passive RFID (18000-6C) tags shall be issued by the CLIENT at the CONTROL CENTRE typically managed by the personnel so authorised by the CLIENT.
- b. Each Guard House and Gate shall be equipped at least a desk-top RFID reader / writer, small display unit for customer and a canopy/pole mounted RFID Tag Reader. The turnstiles shall be with embedded RFID readers.
- c. Each RFID tag issued and affixed on a vehicle will have at least the following information stored on it:
  - I. A Unique serial number
  - II. Vehicle Registration Number
- d. The Vehicle information written on the tag as defined by the IA&S is typically based on a system that relates to the Registration Certificate of the vehicle.
- e. Customer Vehicles with valid RFID tags affixed on them, will be allowed to pass through dedicated lanes at IA&S enabled campus. During this passage IA&S transactions will be generated and stored in the local IA&S server. The most relevant violation related to an IA&S transaction is a vehicle information mismatch between the information stored on the tag and the information determined by the security personnel. Such violation transactions will be recorded and then sent to the IA&S with supporting images (that can clearly help distinguish the vehicle class) for further processing. The same process shall be adhered to in the case of personnel/guests entering the campus through the various designated access points in the campus.
- f. An RFID tag can be issued to a customer as
  - I. A Resident Tag
  - II. A Guest Tag



## **IT Backbone, Access Control & Surveillance System**

### **2.4.3 IT Infrastructure Hardware / Equipment**

The bidder should provide the required IT infrastructure hardware and software components for IA&S solution:

- a. The bidder shall be provisioning all required IT infrastructure for IA&S solution project and store them safely at site at its own cost till they have been commissioned and handed over to the CLIENT.
- b. The IT infrastructure should be designed to be scalable to meet the SLA requirements over the contract period.
- c. The bidder should provide all required operational equipment/s.
- d. The bidder should make use of the operational communication network including necessary hardware / equipment as provided by the CLIENT which shall include a pre-designated network of optic fibre cable/s. All other equipment required to access and utilise this network shall be provided by the Bidder.
- e. The successful bidder will provide network infrastructure requirement that CLIENT needs to put in place for ensuring that the system network has sufficient bandwidth to support:
  - I. Real-time messaging, e.g. device alarms/ alerts, Tag/Smartcard registration, etc.
  - II. Handle peak flows and has a capacity for all reporting requirements.
- f. The entire AC&CS shall be managed through a dashboard style of Graphical User Interface (GUI).
- g. The bidder shall be responsible for provisioning, monitoring and managing the entire communications network in accordance with best practices including the routers, switches, firewalls, proxy servers, access/ terminal servers and other network equipment, allowing real time alerts and alarms to enable the prioritisation of faults. The bidder shall ensure that monitoring of each component of network is done end to end.
- h. The bidder shall provide 3rd party Software, wherever required, to complete the required functionality of the proposed IA&S System

### **2.4.4 Services**

- a. The bidder should be responsible for the following throughout the contract period:
  - I. Development of Detailed System Requirement Specification;
  - II. Design, customise and implementation of IA&S solution;
  - III. Training, knowledge transfer and develop local skills to manage and operate IA&S solution within the timelines specified in this document;
  - IV. System documentation;
  - V. Operation Management;
  - VI. System Maintenance and Support.
- b. The bidder shall be responsible to design network architecture and access requirement of various communication services required for the System.
- c. The bidder shall be responsible for providing, installation, testing, configuration and commissioning of effective and efficient networks for IA&S Solution.
- d. Interactions with stakeholders where applicable.
- e. The bidder shall be manufacturers of atleast the control units/cards (as the case may be) and shall have in-house capabilities of system integration and developing application software/s as required for the Project described in this document.

### **2.4.5 Data Backup and Archival**

## **IT Backbone, Access Control & Surveillance System**

The bidder shall be responsible to put in place a mechanism for efficient data backup, archival and recovery. They shall develop a strategy for backup, archiving and recovery of data and submit the same to CLIENT for review and approval.

### **2.4.5.1 Data Backup and Recovery process**

- a. Daily data backup of all devices and solution components shall be maintained in order to ensure continuity of business operations.
- b. Detailed recovery processes shall be laid to allow restoration of information from backups.
- c. The bidder shall need to ensure that data is complete i.e. no data is lost or omitted from any collections and/or transmission process at all levels of the System.
- d. The backup and recovery will not take more than one hour. The functionalities and performance of the IA&S System shall not degrade during backup process.
- e. The system should have provision to identify and load the data from data archive if need arises.

### **2.4.5.2 Site Manual**

Additionally, bidders are expected to produce a Site Manual. Such a manual is not expected to replace the product specific manuals. The contents of the manual shall include but not be restricted to:

- a. Configuration details of each Server
- b. Server and PC application Software Details (including software and service pack version)
- c. Security features
- d. Backup strategy and procedure including site script
- e. Details of the backup media, including the media names
- f. Details the backup schedule
- g. Restoration procedures
- h. Network Configuration and Plan

### **2.4.6 Integration**

The bidder shall be responsible for integration of all modules of the IA&S System Application Software, irrespective of the fact that any module/ sub- system compatibility is in the scope of the bidder. The bidder will conduct testing of the modules which are not in its scope and satisfy it that the complete IA&S System will function as per requirement. The Bidder shall have demonstrated capability of having integrated such components (in any permutation or combination) as specified in the IA&S system in this document in excess of at-least 50 sites.

### **2.4.7 Control Centre Equipment**

The complete Control Centre Equipment including Commercial Off-The-Shelf (COTS) computer hardware, software, access control and network equipment (Servers - Data Centre Equipment) shall be provided by the bidder.

## **2.5 Operation, Maintenance and Support**

## **IT Backbone, Access Control & Surveillance System**

- a. The Bidder shall take complete, end-to-end responsibility to demonstrate the IA&S system as operational and provide the set of deliverables as defined in requirements.
- b. The Bidder's staff should have an excellent understanding of the IA&S systems and adequate knowledge the IA&S systems including IT services.
- c. The Bidder shall be responsible to provide skilled resources to meet and manage the expectations of the stakeholder.
- d. Delivery of service can be performed onsite at Bidder's location or offsite or a combination of both.
- e. Operational Service Requirements - The requirements are defined below but not limited to the following:
  - I. Manage and Monitor day to day operation of IA&S System 24x7x365
  - II. Manage and Maintain System configuration
  - III. Manage and Maintain master and configuration data
  - IV. Track and recover lost data
  - V. Manage, monitor and maintain Application and Database
  - VI. Manage, monitor and maintain security including breaches and threats
  - VII. Manage and maintain system backups as per backup strategy
  - VIII. Restore system if need arises
  - IX. Manage, monitor and maintain User Management
  - X. Manage, monitor and maintain Systems Management and administration
  - XI. Monitoring, reporting and analysis of service performance and end-user experience
  - XII. Provide proactive service performance optimization
  - XIII. Maintaining the existing Application Software in good working condition.
  - XIV. Manage and maintain interface with the components of IA&S
  - XV. Determine, trace, resolve and document suspected malfunctions and correction thereof the IA&S system
  - XVI. Pro-active monitoring of essential services to anticipate potential problems in every area of IA&S solution and interfacing systems
  - XVII. Follow the predefined escalation procedure set for IA&S operation and management
  - XVIII. Structured problem solving, troubleshooting, bug fixing for IA&S solution and interfaces that may occur from time to time.
  - XIX. Manage and maintain change control
  - XX. Provide truthful advice to CLIENT on issues pertaining to Business.
  - XXI. Attend Operational and Management meetings and discussions

### **2.6 General Terms of Contract**

- 2.6.1** In relation to the supply, installation, testing and commissioning of the IA&S works and the works associated with it within the meaning and terms of this sub-contract are concerned, the terms of reference wherever appearing in this document, pertaining to the responsibilities with Client shall apply mutatis mutandis to the successful bidder and shall, therefore, be deemed assigned to the bidder for carrying out the said works and obligations.
- 2.6.2** The works to be undertaken by the successful bidder shall be on total turnkey basis for absolute fulfillment of the functional requirement of the IA&S in terms of the IT backbone, access control, and surveillance system to be undertaken under the terms of the documents and details enclosed herewith. Therefore, it is to be understood that even if any item of work or services being otherwise deemed necessary as part of the requirements of the project (in

## **IT Backbone, Access Control & Surveillance System**

terms of documents, specifications and functional requirements spelt in the details attached herein, or understood as such through site visits, correspondences and personal interactions), is not included in the detailed price bid as submitted thus by the turnkey integrator, or is missed through any reasons whatsoever, this shall not relieve the turnkey integrator of his responsibilities to carry out the work and shall be at no additional cost to IIM KASHIPUR.

- 2.6.3** The bidder shall develop his own detailed item breakdown (commensurate with the functional requirements and specifications of the project) to arrive at the total final price in fulfillment of the requirements of this turnkey contract.
- 2.6.4** The price bid shall consider all materials and equipment necessary for undertaking the works including hardware, software and necessary third party licenses should be delivered complete at site. In this way, all transportation costs including freights, shipment, forwarding insurances, etc. and other incidental expenses deemed necessary, shall be included in the offer at no extra cost to IIM KASHIPUR.
- 2.6.5** Rates shall include all applicable charges like packing, shipping, surface transport and unloading at site, etc. and delivery, installing, testing, commissioning, documentation, training and maintenance.
- 2.6.6** The bidder along with their offer, shall also include a detailed date wise schedule of supply and delivery of equipment at site, installation, commissioning and thereafter testing in operative condition by IIM KASHIPUR representative/s. Please note, we envisage a testing by IIM KASHIPUR at site for a period of 1-3 days. In addition, IIM KASHIPUR may choose to do a factory acceptance test (FAT) including travel, lodging and boarding for a minimum of 2 members of IIM KASHIPUR, shall also be included in the price bid.
- 2.6.7** All necessary insurances, levies, OCTRAI, VAT, taxes (incl. service tax) and duties including customs, excise, sales, other statutory deductions and commissions both for local and/or foreign consignments, shall be considered by the integrator at his own cost while making the offer. The successful bidder shall submit the receipts for evidence of having made all the above applicable payments in full to IIM KASHIPUR.
- 2.6.8** The final offer shall consider sufficient spare parts and special test equipment to allow for maintenance of the equipment as per the terms of the requirement. The bidder shall give a list of recommended spare parts and their value.
- 2.6.9** Defect Liability Period / Warranty shall be for two years from the date of commissioning or 24 months from the date of supply if the site is not available within 120 days from the award of the contract to the successful bidder. Any defects either in the material/equipment supplies or workmanship during this period shall be rectified by the successful bidder at their own cost. During this period of DLP/Warranty the bidder will be responsible for providing 24 hours maintenance support at site or remotely, as applicable, along with replacement of spares, if any.
- 2.6.10** The detailed offer shall consider complete installation of the IA&S equipment including commissioning & testing, training to staff, preparation and submission of detailed functional

## IT Backbone, Access Control & Surveillance System

specifications, detailed design documents, as-built documents and documents pertaining to Maintenance procedures and manuals thereof.

**2.6.11** The detailed offer shall consider complete system integration including supply and installation of all cabling and civil works associated therewith. Cabling, ducting, earthing, lighting and surge protection shall be included in the offer. All cabling to the IA&S equipment, the optical fibre backbone laying and commissioning shall be provided by the bidder.

**2.6.12** All prices and amounts to be quoted in Indian Rupees (INR).

**2.6.13** Payment terms are as under for foreign and local components:

At the time of award of the contract to successful bidder

(Maximum 10 % Advance Payment for Mobilization and Equipment purchase after contract signing against bank guarantee of 110% of advance amount in the format prescribed by Institute)

a) Delivery at site	75%
b) After installation of IA&S equipment	20%
c) After issuance of Completion Certificate	5%

Payments for all milestones from (a) through to (c) above shall be made through a cheque or RTGS within 30 days of the successful completion of the milestone and raising of bill by the contractor.

Recovery of such sums advanced shall be made by the deduction from the contractors bills commencing after first ten percent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time eighty percent of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount upto the date of recovery of the instalment.

**2.6.14** The bidder is required to submit the monthly progress report for all activities completed in the last month and planned for the next month. The report should reach the CLIENT by 5<sup>th</sup> of the calendar month.

**2.6.15** The bidder shall visit the site to know about the ground conditions. No claims shall be entertained on the grounds of inadequate knowledge of ground conditions.

**2.6.16** Taking into consideration the above, together with other relevant details as necessary, we now invite you to participate in the bidding process and send us your detailed proposals in the form of comprehensively detailed price estimates for carrying out the works.

**2.6.17** You are required to send us your detailed price estimate to reach us by the date mentioned in the Notice Inviting Tenders. CLIENT may decide to call the final shortlisted bidders to the IIM KASHIPUR office or any other suitable location for further clarifications to decide on the most appropriate technical proposal to be adopted keeping in mind the most economical proposals.

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### 2.6.18 Requirements for Insurance

- (a) All insurance shall be effected with an Indian Insurance Company incorporated and registered in India.
- (b) The Contractor shall at his own expense arrange for all insurance policies, including workmen compensation policy, and all risk policy in the 115% amount of the Contract effective from the date of commencement of Work(s) and until final completion of the Work(s) also taking into consideration the defects liability period, against all of the following risks.
  - i. *Injuries and damage of persons, property, machinery, equipment, vehicles, animals or things, within or outside the site, arising out of his operations or of any sub-Contractors, nominated or otherwise, or out of any actions of his employees, agents or representatives, minimum limited to Rs.5,00,000 (Rupees Five Lakhs) and maximum limit is unlimited per accident*
  - ii. *Injuries to his or any Sub-Contractor's employees.*
  - iii. *Damage to or loss of the property, equipment, and materials at site, of the Owner, Contractor and all Sub-Contractors, as a result of natural causes such as lightning, storm, flood, rain, fire, earthquake, explosion, landslide, etc.*
  - iv. *Damage and injuries to persons, property and materials arising out of riot and civil commotion, theft, sabotage malicious acts, terrorist activities, flood, water logging, fire, etc.*
  - v. *Third party liability insurance (sum insured – 20 Lacs)*
- (c) The insurance policy or policies to cover risks of every nature shall be in the joint names of the Owner and Contractor, and the original of such policy/ policies shall be lodged with the Engineer-in-Charge. The Contractor shall also lodge the premium receipts with the Engineer-in-Charge, such standing jointly in the names of the Owner and the Contractor.
- (d) If the Contractor fails to arrange the requisite insurance or fails to renew the policies, the Owner shall arrange for obtaining the requisite insurance policies and or renew them and recover the cost of all premiums from the Contractor and/or subsequently deduct such amount from the payments due and payable by the Owner to the Contractor from the bills raised by the Contractor in respect of the Work(s) executed.
- (e) No certificate of payment shall be issued by the Engineer-in-Charge whether for an interim or of the final bill raised by the Contractor if the

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Contractor fails to arrange for total insurance cover.

- (f) The Contractor shall reinstate in a manner approved by the Engineer-in-Charge all damage of every sort caused entirely at his cost so as to deliver up to the Owner the whole of the Work(s) complete and perfect in all respects, and so certified by the Engineer-in-Charge and also make good or otherwise satisfy all claims for damage to property of third parties.
- (g) The Contractor shall be responsible for anything within his control and for all risks and consequences, which are not included in the purview of the insurance policies.
- (h) The insurance cover shall stand extended until final completion of the Works and the contract, and shall also cover the defects liability period.
- (i) The Contractor undertakes not to cancel any insurance policy nor reduce its scope without the written consent of the Engineer-in-Charge.
- (j) The Contractor undertakes to file necessary insurance claims jointly with the Owner and also to join the Owner in filing any claim the Owner chooses to.
- (k) Payments against all insurance claims shall be received in the name of the Owner and commensurate adjustments shall be made in accounts with the Contractor.
- (l) The aforesaid insurance policy/policies shall not be cancelled till the Engineer-in-Charge has agreed to their cancellation.
- (m) The Contractor shall prove to the Engineer-in-Charge from time to time that it has taken out all insurance policies referred to above and has paid the necessary premium for keeping the policies alive till the end of the defects liability period.
- (n) The Contractor shall ensure that similar insurance policies are taken out by his Sub-Contractor (if any) and shall be responsible for any claims of losses to the Owner resulting from their failure to obtain adequate insurance protections in connection thereof. The Contractor shall also obtain the originals of the policies and the premium receipts from the Sub-Contractor and shall lodge the same with the Engineer-in-Charge.

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## 3 FIBRE CABLE SINGLE MODE 9/125µm OUTDOOR ARMOURED 144 CORE

### (12 Loose tubes of 12 Core each)

The backbone network infrastructure for the overall master plan for various IT services, BMS services, IA&S system and other services is through the Optical Fibre.

A 144 Core Single Mode Fiber Optic (SMFO) (Consisting of 12 Loose tubes of 12 cores each) cable shall be laid in rings for each zone. Maximum facilities/ units connected to each zone are limited to 12 as one loose tube of SMFO cable caters to one facility/unit. Eventually, there would be two or three zones (Considered in sync with the Phases as 1 & 2), of Fiber cable (144 core – 12 loose tubes with 12 cores each, independent rings), laid through the HUME (atleast 150mm) trunking.

Different Hume pipes should be used if the same cable is returning from any tap off point. One Hume pipe is used for laying the cable till the destination and other Hume pipe is used for return path.

The unterminated fiber layed in the ring (for future termination at the blocks), will be left as 50m rolls/ loops (uncut), in the 750mm Manholes provided as “tap off” for connectivity to blocks.

### 1. SPECIFICATIONS

Maximum Individual Fiber Attenuation at:

1310nm	$\leq 0.33\text{dB/km}$
1490nm	$\leq 0.21\text{dB/km}$
1550nm	$\leq 0.19\text{ db/Km}$
Zero dispersion wavelength	1300 to 1324nm
Cable cut off wavelength	$\leq 1260\text{nm}$
Cladding diameter (µm)	125
Core diameter (µm)	8.2 - 9.0
Coating diameter (µm)	245
Type of fiber	G.652D

Cable properties:

No. of fibers	12 Tubes x 12 Cores = 144 Cores
Tight Buffered with central strength member, Plenum (2Hr rated) & armored Cable outer diameter (mm)	$\leq 18$



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## GENERAL FIBRE OPTIC CABLE LAYING PROCEDURE

- Please be sure of all connecting joints. There should not be any loose joints / gaps. They should be securely jelly filled.
- All Fiber cable to be labeled & marked at every 2m. The fiber cable will be identified as "OFC DATA Cable #" using tags that are firmly secured on the cable. The # is the cable identifier which may be only a number. No paper prints or adhesive tapes are allowed. The tags will be plastic or aluminum embossed with the letters and tied with cable ties. Detailing the source & destination after every 4m (Specifically in the LV Shafts opening on the floors).
- Final layout drawings / certification are the part of completion of work.
- Periodic & final inspections certificates (detailing the completion of work) are mandatory for clearance of payments. The Solution Provider, Client and PMC will do periodic Inspection & Completion check.
- Any deviation in the specifications of the product must be informed prior to the award of tender for approval. No changes will be accepted after the award of tender.
- Coordination of work, with the other vendors, will be sole responsibility of the Solution Provider.
- Sample of approved material to be submitted after award of tender.

## 2. IMPLEMENTATION

Prior to all work of this Contract, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence. Verify that the work of this Contract may be completed in strict accordance with all pertinent codes and regulations, the approved shop drawings and the manufacturer's recommendations.

Upon award of Contract, provide a graphic schedule detailing the entire installation. Cooperate with the Main Solution Provider, site project team and other trades to integrate the Solution Provider's schedule with the overall project schedule.

The Solution Provider shall submit to the Project In-charge, detail of test procedures and checklist for all testing and commissioning that will be carried out during the in-plant test and the site acceptance test. These must be submitted as a total package to the Project In-charge, at least 4 weeks prior to the earliest schedule test, for comments and approval.

As part of the test procedures, the Solution Provider shall submit full details of the proposed test equipment.

On completion of all testing in each phase, the manufacturer will submit the completed test sheets, signed off by the Solution Provider's authorized engineers and clients

On handing over of the system the tender will provide complete set of all test sheets and commissioning certificate stating that the system has been installed and commissioned to the requirement of the specification. OEM site certification is mandatory. This would be one of the major documents, for release of final payment.

## 3. ACCEPTANCE TESTING

It's essential to have a certified test report from the OEM, with regard to the testing of Fiber in this FTTxEnvironment. The testing should happen on all the three wavelengths of 1550, 1490 & 1310nm,

## IT Backbone, Access Control & Surveillance System

for loss Budget & performance. Equipment's used, should be OTDR's, Point to Point power meters& Power source, Visual fault Locators, Optical loss test sets (OLTs), to be very specific.

#### 4. DEFECTS LIABILITY

Defect Liability Period / Warranty shall be for two years from the date of commissioning. Any defects either in the material/equipment supplies or workmanship during this period shall be rectified by the successful bidder at their own cost. During this period of DLP/Warranty the bidder will be responsible for providing 24 hours maintenance support at site or remotely, as applicable, along with replacement of spares, if any.

#### 5. TOOLS AND TACKLES

The tenderer shall provide tools and tackles as mentioned below:

S.NO.	TOOL NAME
1	Fluke DTX 1800 Cable Analyzers.
2	Fluke DSP 4300 Cable Analyzers.
3	DTX-CLT Optical Loss Test Set
4	Fluke DTX SFM2 Single mode fiber modules.
5	FUJIKURA FSM-50S Fiber cable splicing equipment.
6	FUJIKURA OFSM-60S Fiber cable splicing equipment.
7	FLUKE 5-pair Impact tools.
8	FLUKE D-814 Impact tools.
9	FREEMANS Wheel Measurement Tools.
10	FLUKE Jack Rapid Punch Down Tools.
11	FLUKE Cable Cutters.
12	FLUKE Fiber Cable Cleaning kit
13	AMP Modular Jack Termination Kit.
14	PANDUIT Cable Dressing Tools
15	PANDUIT Jack Termination Tools.
16	PANDUIT Copper Wire Snipping Tools.
17	PANDUIT Cable Jacket Stripping Tools.
18	LETATWIN LM 380A-LETATWIN Ferrule printers.
19	PANDUIT Pan Maker Software for Printing all the Panduit stickers.
20	CASIO Label Printers for Labeling of Network Devices.

#### 6. MAKE LIST

Systimax , TE'amp, Schneider Actassi

The successful tenderer shall take prior approval of make from the client / PMC, in case, the equipment make is not indicated in the preferred make list.

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## ELIGIBILITY CRITERIA

The firm participating in the bid submission should satisfy the following eligibility criteria

1. The Bidder shall have been involved in the similar works for last seven years or more in India.
2. The Bidder shall have satisfactorily completed following works (any one option out of three options given hereunder) during last seven years commencing from 1st August'2008 and ending on 31st July'2015: (Refer Form-3)

Options	Eligibility Criteria
Option-1	Three similar works each costing not less than 40% of the estimated cost put to tender
Option-2	Two similar works each costing not less than 60% of the estimated cost put to tender
Option-3	One similar work costing not less than 80% of the estimated cost put to tender

**Note: Experience prior to 1st August'2008 and after 31st July'2015 will not be considered for determining eligibility.** In-addition, bidder should have completed one work of any nature costing not less than the amount equal to 40% of the tender estimated cost with some Central Government Department / State Government Department / Central Autonomous Body / State Autonomous Body / City Development Authority / Municipal Corporation of City formed under any Act by Central / State Government and published in Central / State Gazette.

3. Similar work shall mean "Supply, installation and maintenance of Information Technology system, Access control and surveillance system in Institutional or Commercial buildings Campus Area" executed in India.
4. The eligible Bidder is required to have average annual financial gross turnover of minimum estimated cost put to tender on similar works in for three consecutive financial years (Relevant Years) ended 31st March 2015. Further, the aforesaid average turnover will be computed after considering price updation of 7% per annum to bring the turnover of the Relevant Years to 2014-2015 Price Level. **(Refer Form – 2-i)**
5. As per the audited financial statement and after considering the impact of qualifications, the Bidder shall not have incurred any loss in more than two years during the last five financial years ending 31st March, 2015. **(Refer Form – 2-i)**
6. Should not be black listed by any State/Central Govt. Department or PSU or Autonomous bodies. The Bidder must submit a duly notarized affidavit to this effect. Applications received without this declaration in original shall stand automatically rejected.

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7. It is mandatory that the Bidder has at least one of the certifications, namely ISO-9001:2008, 14001:2004 or ISO18001:2007 valid on the date of bid submission.
8. The value of works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum: calculated from the date of completion to last date of receipt of bid for technical documents.
9. Joint Ventures and consortium are not allowed to bid.
10. Solvency certificate to be provided for the minimum amount equal to 40% of the tender estimated cost from scheduled banks. The bidder shall submit a Certificate in original, not issued prior to 30th April 2015 by any scheduled bank. (Refer Form – 2-ii)
11. The bidder should have positive net worth and working capital for three consecutive financial years (Relevant Years) ended 31st March 2015. In-addition for the financial year ending 31st March'2015, the bidder should have a net worth of the 40% of the estimated cost of the work put to tender.
12. The bidder should be the developer of the software and hardware used for the integration of the various components of such a system / project. The Bidder must submit a duly notarized affidavit to this effect.

### *Essential Submissions and Information*

- i. The bidder shall provide copies of work orders as well as completion certificates from its customers as documentary proof for having executed similar works. However, decision with regard to eligibility of the Bidder will be taken by the Institute, only after necessary documents provided by the Bidder have been examined **(Form 3)**
- ii. The Bidder's performance for each work completed in the last seven years and works in hand shall be certified by an officer not below the rank of Executive Engineer or equivalent and shall be obtained in sealed cover. **(Form 5)**
- iii. It is desirable that the Bidder does not have any major litigation(s) in process. The Bidder must submit information of on-going litigations and the history of concluded litigations in the past five years. In the event that the Bidder has no litigations either in process or in the past 5 years, an affidavit to this effect, duly notarized must be submitted in original. **For all the pending litigation, it shall in total not represent more than 20% (twenty percent) of the Bidder's net worth and an affidavit to this effect duly notarized must be submitted in original.**
- iv. The Bidder must submit an undertaking that he is not in default of payment of Statutory dues (other than disputed dues being contested by them) and that up to tax returns have been filed along with the payment of due taxes, and submit copies of such returns submitted to the IT department/ Department of Trade and Taxes.
- v. The Bidder needs to make disclosure of any liquidated damages or penalties imposed on it by the customers towards delay in completion of the project or for not meeting the contractual specifications, including issues relating to defects, workmanship and

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- warranty obligations.
- vi. The Bidder will be required to give an ***undertaking*** that it would comply with all statutory laws and compliances, including those applicable to the subcontractors appointed by him and indemnify the Institute of all implications and consequences resulting from any non-compliances due to any reasons whatsoever.
  - vii. The Bidder may submit experience documents pertaining to works for the GRIHA certified building or campus, if any.
  - viii. A "Self Evaluation Data Sheet" is provided at the end of forms. The bidder need to fill the details in it as per instructions given in it and provide the excel sheet in soft and hard copy.
  - ix. Bidder shall submit all the information in digital format also (in addition to hard copies – 1 original and 1 copy) in CD/DVD (3 nos. each) in editable excel/word format wherever applicable. Scanned copy of work orders, certificates may be in pdf format. In case of non-matching of documents in CD / DVD & hard copy, document submitted in original hard copy shall prevail for evaluation purpose. Client's evaluation in sealed envelope need not be submitted in CD/DVD format. The documents are to be stored in CD / DVD in the folders as shown in the check-list provided.

### ***Organization Information***

Bidder is required to submit the information in respect of his organization (**Form 1**). The bidder should have sufficient number of Technical and Administrative employees for the proper execution of the contract work. The bidder must submit the list of employees stating clearly how they would be involved in this work (**Form 6**).

### ***Construction Plant & Equipment / List of Sub-Contractors***

Bidder shall furnish the list of manufacturing plant and installation equipment likely to be used in carrying out the work (**in Form "7"**). List of sub-contractors, facilities of lab and test equipment shall also be furnished.

### ***Evaluation Criteria For Technical Qualification***

For the purpose of qualification, Bidders will be evaluated in the following manner:

- i. The initial criteria prescribed above in respect of experience of similar works completed, financial turn over, and certifications etc. will first be scrutinized together with essential submissions and information and the Bidder's eligibility for technical qualification for the work shall be determined. Only those Bidders who meet the eligibility criteria, above shall qualify and all other bids shall automatically stand disqualified.
- ii. The Evaluation Committee at its discretion may call for information from clients of similar works carried out or in progress by Bidders and evaluate the previous completed projects regarding all submission including litigations.
- iii. Physical inspection at random for each Bidder, of completed projects of Bidders found

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eligible may be performed by an Evaluation Committee appointed by IIM Kashipur for taking feedback from the client. The evaluation committee representative may visit similar works done by the Bidder in the past. The exact number and the works visited shall be decided by IIM Kashipur. On receiving adverse customer feedback by the committee, the bidder may be liable for dis-qualification even if it documents meet the eligibility criteria.

### ***Evaluation of Financial Bids***

- i. After evaluation of technical portion of bids, a list of qualified agencies will be prepared. Short listing of the bidders shall be done after thorough verification of their credentials and inspection of similar works carried out/in progress by them, through a Committee to be constituted by IIM Kashipur. Thereafter, qualified agencies only would be invited to attend the financial bid opening. IIM intends to award the work to the most responsive financially lowest bidder, however, the decision of the IIM board of governors shall be final and binding upon all.
- ii. Any effort on the part of the Bidder or his agent to exercise influence or to pressurize the Institute would result in automatic rejection of his bid. Canvassing of any kind is strictly prohibited.
- iii. Among all the technically qualified bidders, the most responsive financially lowest bidder may be awarded the contract.

# IT Backbone, Access Control & Surveillance System

## ANNEXURE A

The following sections contain the brief technical specifications for the various components proposed a part of the IA&S.

### 1. Turnstiles

S.N.	Specification	Value	Unit	Special Remarks
1	Mains supply Voltage	230	V	Through online UPS
2	Mains supply Frequency	50	HZ	
3	Type	Single	Person	
4	Operating power supply	24	V	
5	Operation	Electromechanical		
6	Turnstile Operation	Bidirectional	-	
7	Turnstile Sectors	120	Deg.	
8	Electronic Panel	Yes		
9	Damper	Hydraulic		
10	Operation Indicators	LED	Kg	
11	Weight	350	Kg	+/- 10%
12	Control Devices	Stop, Clockwise, Anti-clockwise, Release		Button/switch
13	Temperature range	-20to+55	Deg C	
14	Humidity range (RH)	90	%	
15	Measurements(w/l/h)	1500x1500x2300	mm	+/- 5%
16	Measurements (w/h) Passage	650x2100	mm	+/- 5%
17	Type of Installation (Outdoor)	Outdoor		
18	Ingress Protection(IP)	IP44		
19	MCBF	1,000,000	Cycles	
20	Structure	Galvanized, Painted Steel	-	
21	Material	AISI 304 SS		
22	Steel arm dia	40	mm	
23	Others	Courtesy light		
24	<b>Make</b>	<b>CAME, MAGNETIC, ELKA</b>		Or equivalent

Location of Turnstile	On Main Gates
Purpose of Turnstile	To control the flow of personnel

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### 2. Boom Barrier

S.N.	Specification	Value	Unit	Special Remarks
1	Mains supply Voltage	230	V	Through online UPS
2	Mains supply Frequency	50	HZ	
3	Drawn power	0.37	kW	
4	Running time	0.9	Sec	
5	Boom Operation	Swing Open	-	
6	Boom Profile	Round	-	With red reflective
7	Boom length	7000	Mm	
8	Boom Dia	60	Mm	
9	Boom Weight	2.6	Kg	
10	Barrier weight	47.5	Kg	
11	Duty cycle	100	%	
12	Temperature range	-20to+70	Deg C	
13	Humidity range (RH)	90	%	
14	Measurements(w/l/h)	350x300x930	Mm	
15	Type of Installation (Outdoor)	Outdoor		
16	Ingress Protection(IP)	IP54		
17	Operation Warranty	2 Million	Cycles	
18	Housing	Non corrosive metal	-	
19	Standard Applicable	ISO-9000		
20	<b>Make</b>	<b>CAME, MAGNETIC, ELKA</b>		Or equivalent

Location of Barrier Gate	On Main Gates
Purpose of Barrier Gate	To control the traffic flow



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3. Inductive Loop: For the detection of vehicles as an input to operating the boom barriers.

S.N.	Specification	Value	Unit	Special Remarks
1	Sensing Mechanism	Electro-magnetic		
2	Operating Temperature	-40to90	Deg C	
3	Operating Humidity RH	95	%	
4	Type of Installation(Indoor/Outdoor)	Outdoor		
5	Ingress Protection(IP)	IP67		
6	Operating Vehicle Speed	0-80	Km/h	
7	MTBF	50 000	Hrs	
8	MTTR	One week		<i>Replacement (Consumable)</i>
9	Resistance to Temperature Gradient	Yes	-	
10	Resistance to excess water run-off	Yes	-	
11	Immunity Interference	Yes	-	
12	Counting Accuracy(LoopConfiguration)	99.9*	%	
13	Standard Complied with	ISO-9001		

Location of Sensor Loop	Embedded in ground prior and post the boom barrier gate
Purpose of Sensor Loop	To sense the presence of Vehicle

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### 4. System Controller/s

S.N.	Specification	Value	Unit	Special Remarks
<b>Processing Unit</b>				
1	CPU	Intel Xeon		
2	Clock Speed	3.33	GHz	
3	RAM	2	GB	
4	Hard Disk	320	GB	or better
5	Ports	USB, Ethernet		
6	TCP/IP	Yes		
<b>Interface Unit</b>				
7	Loop Detector	Yes		
8	Other Sensor Inputs	4		
9	Digital inputs	6		
10	LED indication for digital inputs	Yes		
11	Digital Outputs	6		
12	LED indication for digital	Yes		
13	Relay Board	Yes		
14	Circuit Breaker	Yes		
15	17"TouchScreenMonitor	Yes		Make AOC
16	Industrial SMPS	Yes		
<b>Controller's enclosure</b>				
17	Housing	Non-corrosive, Powder Coated		
18	TamperProof	Yes		
<b>Controller's operating parameters</b>				
19	Operating Temperature	-5to60	Deg C	
20	Ingress Protection	IP54		
21	Operating Voltage	230	V	
22	Operating Frequency	50	Hz	
23	MTTR	24Hrs		
24	MTBF	10 Year		
25	Make	IRD		Or equivalent

Location of Controller	Inside the Guard House / Control Room
Purpose of Controller	To control the various components of the Gates

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### 5. LED Monitors

<b>Display</b>		
Type	LED	
Screen Size	40"	
Max. Resolution	1,920 x 1,080	
Brightness	350cd/m <sup>2</sup>	
Contrast Ratio	5,000 : 1	
Aspect Ratio	16 : 9	
Viewing Angle (H/V)	178° / 178°	
Display Colour	16.7million	
Response Time	8ms (G to G)	
Video System	NTSC / PAL	
Panel Life	50,000hours	
Filter Type	3D combfilter	
<b>Interface</b>		
Video	Connector	VGA, DVI, HDMI, Component (CVBS common)
RGB / DVI	Connector	Analogue D-sub (15 pin), DVI-D
	Input Signal	0.7Vp-p ±5%
	Available Format	640 x 480@60Hz/66Hz/72Hz/75Hz (VGA), 720 x 400@70Hz, 800 x 600@56Hz/60Hz/72Hz/75Hz (SVGA), 832 x 624@75Hz, 1,024 x 768@60Hz/70Hz/75Hz (XGA), 1,152 x 864@75Hz, 1,280 x 720@60Hz, 1,280 x 800@60Hz,1,280 x 1,024@60Hz/75Hz (SXGA), 1,360 x 768@60Hz, 1,440 x 900@60Hz, 1,600 x 900@60Hz, 1,680 x 1,050@60Hz, 1,920 x 1,080@60Hz
HDMI	Connector	HDMI
	Available Format	640 x 480p@60Hz, 720 x 480p@60Hz, 720 x 576p@50Hz, 1,280 x 720p@50Hz/60Hz, 1,920 x 1,080i@60Hz, 1,920 x 1,080p@60Hz
Audio	Connector	RS232C (L/R)
	Output Signal	Loop-through line level (PC only), Speakers : 2 x 5W
Application Support	Remote controller	
<b>On Screen Display</b>		
Functions	VESATM DPM compatible	
Language	Chinese (Traditional, Simplified), English, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Swedish, Turkish	
<b>General</b>		
Electrical	Input Voltage	100 ~ 240V AC (50/60Hz)
	Power Consumption	110W
Environmental	Operating Temperature	0 ~ +40°C (+32°F ~ +104°F)
	Operating Humidity	10% ~ 80% (Non-condensing)

## IT Backbone, Access Control & Surveillance System

Mechanical	Dim. with Stand (WxHxD)	925.4 x 612.6 x 311.0mm (36.43" x 24.12" x 12.24")
	Dim. w/o Stand (WxHxD)	925.4 x 542.6 x 93.5mm (36.43" x 21.36" x 3.68")
	Bezel Size	17.4mm (0.69") / Bottom 20.4mm (0.8")
	Weight	9.8Kg (20.61 lb)
	Cabinet Colour	Black
	Rack Mounts	Optional
	VESAMounts Interface	200 x 200mm
Make	<b>Samsung SMT 4031, LG, SONY or higher</b>	

## IT Backbone, Access Control & Surveillance System

### 6. RFID Readers/Transponders

S.N.	Specification	Value	Unit	Special Remarks
1	Frequency:	UHF 902to 928	<b>MHz</b>	
2	Supported Protocols	EPC Gen 2,ISO18000-6Cprotocol		
3	Operating Modes:	Single Read Point Mode Dual Read Point Mode(with external antenna)		
4	Communications:	RS-232,Ethernet LAN,Wiegand		
5	Data Format:	Configurable 26to 34- bit(Wiegand); Forward compatible for higher Wiegand configurations, upto 154- bit		
6	RFPower:	10 mW- 1Wconducted(+30 dBm)		
7	Power Consumption:	13Wat idle; 40Wtypicalat 2W; 46W maxat 2W		
8	Upgradeable Firmware:	Yes		
9	Operating Temperature:	-40°C to 55°C (-40°Fto 131°F)		
10	Storage Temperature:	-40°C to 85°C (-40°Fto 185°F)		
11	Relative Humidity:	100%, condensing		
12	Dimensions(LxWxD):	30.5x30.5x10.2	cm	
13	Weight:	4.8	kg	
14	Regulatory:	FCC Part 15 compliant		
15	IP	65		
16	Make	<b>3M, STAR, PEPPRL+FUCHS</b>		Or equivalent
17	Model	CR 1000		
18	MTTR	One Week		
19	MTBF	10Years		

Location of RFID Reader	Near Guard House
Purpose of RFID Reader	For vehicle identification

## IT Backbone, Access Control & Surveillance System

### 7. Camera – Bullet Type

S.N.	Specification	Value	Unit	Special
1	Lens Type	Fixed-focal		
2	Maximum Resolution	1280x800		
3	Image Device	1/4"ProgressiveCMOS	Inch	
4	Focal Length	3.6	mm	
5	Aperture	F1.8		
6	Field	Internal/External(Line Lock)		
7	Scanning Frequency (H)	15.625KHz(PAL)		
8	Scanning Frequency (V)	50Hz(PAL)		
9	Horizontal Resolution	570TVLines(700TVLinesB/W)		
10	S/N Ratio	MoreThan50dB(AGCOff)		
11	Minimum Illumination	Color:0.0003Lux(Sens-upAuto,F1.2)(0.1Lux:Sens-upoff) B/W:0.00003Lux(Sens-		
12	Video Output Signal	1Vp-pComposite(75)		
13	Function:			
	D&N	ICRD&N		
	WDR	60dB		
	Common	3D-DNR		
	Gain Control	Off/Low/Medium/High		
	Shutter Speed	1/50~1/90,000(PAL)		
	E. Sensitivity	Auto(x1~x128)/Fix:x2,x4,.....x512		
	White Balance	Auto/Pushauto/Manual		
	M. Detection	4Area		
	P.Masking	8Zone		
	OSD Display	O		
	Digital Zoom	X8(BuiltinPan/Tilt)		
14	Power Source	DC12V/AC24V(LS903P-C:230or)		
15	Power Consumption	4.4W		
16	Oper. Temp./Humidity	(-10°C~50°C/0%RH~80%RH		
17	Storage Temp./Humidity	(-20°C~60°C/0%RH~85%RH		
18	Dimension(HxVxD)	Dia66x170	Mm	
19	Weight	702	G	
20	Ingress Protection(IP)	IP65		
21	Standard Applicable	FCC,CE,UL		
22	Make	<b>Vivotek, FLIR, PIPS</b>		Or equivalent

LocationofBulletCamera	Outsidetheguard house
Purpose of BulletCamera	It captures the video of the ever yvehicle

## IT Backbone, Access Control & Surveillance System

### 8. Camera – Dome Type

S.N.	Specification	Valu	Unit	Special
1	Image Device	1/3" Sony SuperHad CCD		
2	Resolution	420	TV lines	
3	Vertical frequency	NTSC: 60Hz/ PAL: 50Hz		
4	Scanning System	2:1Interlace		
5	Illumination	0.5	lux	
6	Lens/Focus point	6	mm	
7	IR Distance	10-40	meter	
8	Operating Voltage	12	V	
9	Operating Temperature	-10to+50	Degrees	
10	Operating Humidity(RH)	10-85	%	
11	Type of Installation	Indoor / Outdoor		
12	Ingress Protection(IP)	IP54		
13	Standard Applicable	FCC,CE		
14	Make	<b>Maximus, BOSCH, FLIR</b>		Or equivalent

Location of Dome Camera	Outside the guard house
Purpose of Dome Camera	It captures the video of the vehicle

## IT Backbone, Access Control & Surveillance System

### 9. Camera – Pan/Tilt/Zoom (PTZ)

S.N.	Specification	Value	Unit	Special
1	Lens Type	Constant, Manual, Spot		
2	Effective Resolution	976x582		
3	Image Device	960H, 1/4-in. Double Scan CCD,720TVL sensor resolution		
4	Focal Length	3.43 – 120	Mm	
5	Aperture	F1.6~F4.5		
6	Field	Internal/External(Line Lock)		
7	Scanning Frequency (H)	15.625KHz(PAL)		
8	Scanning Frequency (V)	50Hz(PAL)		
9	Horizontal Resolution	720 TVL(700TVLinesB/W)		
10	S/N Ratio	>50dB(AGC Off)		
11	Minimum Illumination	Color:0.0003Lux(Sens-upAuto,F1.2)(0.1Lux:Sens-upoff) B/W:0.00003Lux(Sens-		
12	Video Output Signal	1.0 Vp-p / 75Ω, BNC		
13	Function:			
	D&N	ICRD&N		
	WDR	60dB		
	Common	2D/3D-NR		
	Gain Control	Off/Low/Medium/High		
	Shutter Speed	1/50 to 1/10000 second (PAL)		
	E.Sensitivity	Auto(x1~x128)/Fix:x2,x4,.....x512		
	White Balance	Auto/Pushauto/Manual		
	Autopan	4		
	Prepositions	99		
Tours	8			
DigitalZoom	12x(Builtin Pan/Tilt)			
14	Power Source	24 VAC, 50/60 Hz		
15	Power Consumption	50W (Max. with heater)		
16	Oper. Temp./Humidity	-40°C to +50°C/10%RH~90%RH		
17	Storage Temp./Humidity	-20°C to +70°C/10%RH~90%RH		
18	Dimension(D x H)	208 x 295.5	Mm	
19	Weight	3300	Gms.	
20	Ingress Protection(IP)	IP66		
21	Standard Applicable	EN60950-1:2006, +A11:2009, A1:2010, +A12:2011 / UL 60950-1		
22	Pan Range	360 Deg. Continuous		
23	Tilt Range	0-180	Deg.	
24	Manual Speed	0-90	Deg./s	
25	Housing	Vandal Resistant, Metal		
26	Make	<b>Bosch, FLIR, PIPS</b>		Or equivalent

Location of PTZ Camera	Periphery/Boundary Wall
Purpose of PTZ Camera	Monitoring the boundary/periphery of the campus



## IT Backbone, Access Control & Surveillance System

### 10. Biometric Fingerprint Scanner

S.N.	Specification	Value	Unit	Special Remarks
1	Sensor	OPP06		
2	Dimension (L x B x H)	54 x 74 x 82	Mm	
3	Interface	USB 1.1/2.0 Full/High Speed		
4	Resolution	500	DPI	
5	Image Size	248 x 292	Pixels	
6	Image Acquisition Time	500	msec	Full speed
7	Operation Temperature	20-60	Deg. C	
8	Humidity	<90%	RH	
9	Power Source	USB		
10	Supported OS	Windows 2k/XP/Vista/7, Windows Server 2003/2008/, Linux Kernel 2.6 or later	%	
11	Auto-on Function	No		
12	Certificate	KC, UL, CE, FCC		
13	Make	<b>Hamster, BOSCH</b>		Or equivalent

Location of Fingerprint Scanner	Guard Rooms, Turnstiles, Control Centre
Purpose of Fingerprint Scanner	Authenticate personnel access

## **IT Backbone, Access Control & Surveillance System**

### 11. UPS – 1 KVA

As per industry standards for providing a backup of 30 minutes till extended power outages of the state supplied power is restored or the backup power generators commence the supply and to keep the system concerned, online, during the changeover phases.

Makes – **Emersen, GE, Pegasus, Numeric**

### 12. UPS – 5KVA

As per industry standards for providing a backup of 30 minutes till extended power outages of the state supplied power is restored or the backup power generators commence the supply and to keep the system concerned, online, during the changeover phases.

Makes – **Emersen, GE, Pegasus, Numeric**

### 13. Software Licenses (As applicable)

## IT Backbone, Access Control & Surveillance System

### 14. Server/s

S.N.	Specification	Value	Unit	Special Remarks
1	CPU	Intel®Xeon® processor E5-2600 product family		
2	Clock Speed	3.3	GHz	
3	Form factor	2U rack		
4	Processor sockets	2		
5	Internal interconnect	2xIntelQuickPathInterconnect (QPI) links;6.4GT/s;7.2GT/s;8.0 GT/s		
6	Cache	2.5MBper core; Core options: 2,4,6,8		
7	Chipset	IntelC600		
8	Memory <sup>1</sup>	Upto768GB(24		
9	RAM	4	GB	Upgradable
10	Hard disk	3*320	GB	Upgradable
11	Redundant Power Supply	Yes		
12	Redundant FAN	Yes		
13	Raid Support	Integrated RAID – 5		
14	DVD/RW	Yes		
15	Monitor	17" TFT		
16	Mouse	Yes		
17	Interface Ports	<ul style="list-style-type: none"> <li>•Integrated10/100 Gigabit Ethernetport</li> <li>•USB2.0HUB,6HUB</li> <li>•2-RS2329-Pin AT SerialPorts</li> <li>•1-IEEE1284 Parallel</li> </ul>		
18	IP	54		
19	PCI Slots	6		
20	Database	Embedded Database		
21	Server Management	Yes		
22	Operating Voltage	230	V	Through online UPS
23	Operating Frequency	50	Hz	
24	Operating Temperature	10-50	0C	With extra cooling fanprovision
25	Operating Humidity(RH)	8-80	%	
26	Standard Complied With	CE,FCC		
27	Make	<b>Dell, IBM, HP</b>		Or equivalent
28	Model	IBMX3650 M3		
29	MTTR	24Hrs		
30	MTBF	15Years		

## IT Backbone, Access Control & Surveillance System

### 15. Workstation/s

S.N.	Specification	Value	Unit	Special Remarks
1	CPU	Xeon E-1200E V2		
2	Clock Speed	3.3	GHz	
3	RAM	2	GB	
4	Hard disk	320	GB	
5	Monitor	17" TFT		
6	Interface Ports	<ul style="list-style-type: none"> <li>• Integrated 10/100 Gigabit Ethernet port</li> <li>• USB 2.0 HUB, 6 HUB</li> <li>• 2-RS232 9-Pin AT Serial Ports</li> </ul>		
7	PCI Slots	3		
8	DVD RW	Yes		
9	Keyboard	Yes		
10	Mouse	Yes		
11	IP	54		
12	Operating System	Windows 7 or higher		
13	Antivirus	Yes		
14	Operating Voltage	230	V	Through online UPS
15	Operating Frequency	50	Hz	
16	Operating Temperature	10-50	Deg C	
17	Operating Humidity	8-80	%	
18	Standard Applicable	CE, FCC		
19	Make	<b>Lenovo, HP, DELL</b>		Or equivalent
20	Model	IBM Lenovo E 31		Or equivalent
21	MTTR	24 Hrs		
22	MTBF	15 Years		

Location of Workstation	Inside guard room and control centre
Purpose of Workstation	For administration of guard house and control centre

## IT Backbone, Access Control & Surveillance System

### 16. Poles

MS Pole 4.0 to 6 meter

PEDESTAL MOUNTED PU COATED STEEL TUBULAR POLES HIGH

Size:- 114.3 mm O.D. x 4.50 mm Thick x 4.50 mtrs Length with fittings as required to mount the Camera equipment along with any other accessories as required

Base Plate of 450 x 450 x 10 mm Welded to Pole.

M16 x 450 MM LONG FOUNDATION 'L' BOLTS - 4 No's Per Pole

Painting:- Poles shall be painted with 1 Coat of Epoxy Primer & 2 Coats of PU Paint.

Packing:- Poles shall be thoroughly packed with Polythene Air Bubble sheet to avoid paint damage during loading/unloading/transit

Make: **Schneider, Bajaj, Philips, Wipro or equivalent**

## IT Backbone, Access Control & Surveillance System

### 17. Cables & Accessories

#### 17.1 Network Ethernet Switch

S.N.	Specification	Value	Unit	Special Remarks
1	Number of Ports	8&24ports		
	LAN	10/100/1000	BaseT(X)	
	Transmission Distance	Ethernet: Upto 100m(4-wireCat.5e)SFP:Upto10km (depends on SFP)		
		Copper:10/100/1000 Mbps, Auto-Negotiation. SFP: Up to1000Mbps		
2	Connectors	24x 10/100	BaseT(X)	Managed
3	Mac Address	16	K	
4	Power Supply	100- 240	VAC	
5	Operating Temperature	-10to55	0C	
6	Humidity	05to95	%	
7	IP	30		
8	Dimensions(WxDxH)	282.7x 181.1x 44.45	mm	
9	Make	<b>DLINK, CISCO</b>		Or equivalent
10	Model	EKI4668C		
11	MTTR	24Hrs		
12	MTBF	10 Years		

Location of Ethernet Switch	Inside guard house, camera locations, control room.
Purpose of Ethernet Switch	For local area networks

## IT Backbone, Access Control & Surveillance System

### BILL OF QUANTITY

S.No.	Component	Units	Price (INR) In figure	Price (INR) in words	QTY	Amount (INR)
1	Turnstiles	Nos			6	
2	Inductive Loop	Nos			12	
3	Controller	Nos			20	
4	Boom Barrier	Nos			5	
5	LED Monitors	Nos			6	
6	RFID Reader	Nos			16	
7	Camera – Bullet Type	Nos			3	
8	Camera- Booth	Nos			12	
9	Camera- PTZ	Nos			22	
10	Biometric Finger Scanner	Nos			12	
11	Document Scanner	Nos			1	
12	UPS (1 KVA)	Nos			30	
13	UPS (5 KVA)	Nos			10	
14	Installation	Nos			1	
15	License/s – Application Software	Nos			1	
16	License/s – Third Party Software	Nos			12	
17	Servers	Nos			2	
18	Workstations	Nos			6	
19	Poles	Nos			30	
20	Cables, connectors and accessories	Lumsum			1	
21	144 core Fibre optic	Meters			15,000	
<b>Total</b>						

**Note:** The rates quoted above is inclusive of all charges for product, packing, shipping, surface transport, loading and unloading at all locations, delivery at site, installing, testing, commissioning, documentation, training, insurance, taxes (incl. of service tax), levies, duties (incl. of custom, excise, sales, & others), etc. The quotation also includes all charges for minimum 2 members for witnessing of FAT at the manufacturing location. No additional charges shall be payable by CLIENT over and above the mentioned charges.

Total Quotation (in words):

## **Payment Terms Summary**

1. Earnest Money of Bidder : Rs. 9,42,000/-(Nine Lacs Forty Two thousand only) in the form of Demand draft drawn on a scheduled bank in favour of “Indian Institute of Management, Kashipur”, payable at Kashipur.
2. Release of Earnest Money : Successful Bidder – Earnest Money shall form a part of Total Security Deposit  
  
Unsuccessful Bidder- The earnest money will be returned to unsuccessful Bidder within one months after the award and acceptance of the Letter of Intent by the successful Bidder. The Earnest money will not bear any interest.
3. Initial Security Deposit : 2% of the value of the accepted tender value including the Earnest Money, payable through demand draft
4. Amount of performance bond : 5% of contract price in the form of bank guarantee.
5. Period of commencement : 7 (Seven) days from the date of issue of letter of acceptance.
6. Time of Completion : 6 (Six) months as per section of work, from the date of commencement inclusive of rainy days, if any.
7. Liquidated damages for delay : 1.5 %( One point five Percent) per month of delay to be computed on per day basis
8. Limit of liquidated damages : 10 % (Ten percent) of Contract Value
9. Defects Liability period : 365 days from the date of issue of virtual Completion certificate.
10. Mobilization Advance : Allowed on request  
Max. 10% (Ten percent) of contract value against irrevocable bank guarantee (value is 110% of amount taken as advance) from any scheduled bank. A simple interest rate of 10% shall be applied on the advance taken. The recovery shall start from the first running account bill
11. Payment of Materials at site.  
(Secured advance) : Upto 75 %( Seventy Five Percent) of accessed value of Materials brought at site and as decided by the Institute & shall be adjusted in line with contract conditions (As per clause 10B of GCC CPWD 2014)
12. Minimum Amount of Interim /  
Running account bill : Minimum amount certified by Institute / PMC shall be Rs 50, 00,000 (Fifty Lacs)
13. Frequency of submitting Interim/  
Running Account Bill : Once in 1 months
14. Payment of Interim/ running account bill : 10 working days (after bill certification by PMC)



- |  |  |
|--|--|
| 15. Retention Money from Interim/Running Account bills             | : 2.5% (Two point five percent) of Interim/Running Account bill (Max up to 2.5% of contract value including initial security deposit)    |
| 16. Payment of Security Deposit (refund) (EMD and Retention Money) | : Six months after the date of completion  |
| 17. Extra Items account  | : Separate bill to be raised in-addition to running bill   |
| 18. Taxes, VAT, Octroi, duty, levy, etc.                           | : All are included in the quote provided by bidder   |
| 19. Documents to be submitted by contractor for initial payment    | : Security Deposit, Performance Bank Guarantee Insurance Policy, Contract Agreement, any other document as desired by Engineer-in-charge |

The above information provided has to be read along with the various clauses given in the tender document.

Dated \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_.

Signature \_\_\_\_\_ in the capacity of \_\_\_\_\_

Duly authorised to sign tenders for and on behalf of \_\_\_\_\_

---

(IN BLOCK CAPITALS)

Address of Bidder \_\_\_\_\_

\_\_\_\_\_

**FORM '1'****STRUCTURE AND ORGANIZATION DETAIL****INFORMATION ABOUT BIDDER****1. IN CASE OF INDIVIDUAL**

I	Name of Business	
II	Name of Owner	
III	Whether his business is registered	
IV	Date of commencement of business	
V	Current Address	

**2. IN CASE OF PARTNERSHIP –**

I	Name of Partners	
ii	Reference of the partnership registration	
iii	Date of establishment of firm	
iv	If each of partners of the firms pays Income Tax over Rs. 10,000/- per year and if not which of them pays the same	
V	Copies of partnership deed, if any	
Vi	Current Address of all Partners	

**3. IN CASE OF COMPANY LIMITED BY SHARES OR COMPANY LIMITED BY GUARANTEE.**

i	Amount of paid up capital	
ii	Names of Directors	
iii	Date of Registration of Company	
iv	Certified copies of Memorandum and Article of Association of company	

General ( for all )

Sr. No.	Description	
1	Organization Chart (to be submitted)	
2	Designation of individuals authorized to act for the Organization	
3	Was the bidder ever required to suspend work for a period of more than six months continuously after commencement of the work? If so, give the name of the project & reasons of suspension of work	
4	Has the bidder, or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment	
5	Has the bidder, or any constituent partner in case of partnership firm ever been debarred / black listed for tendering in any organization at any time? If so, give details	
6	Has the bidder, or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details	
7	Registration details/ Work detail	
	a) Registration with CPWD / MES / Railways / State PWD/IIT/IIM/Any PSU	
	b) Address of office in Delhi / NCR with its proof, if any	
	c) EPF No. & valid upto	
	d) Sales Tax No. & valid up to	
	e) Clearance of Sales Tax up to	
	f) ITCC valid up to (copies to be enclosed)	
8	Any other information considered necessary but not included above	
9	Any specific information bidder would like to include in the contract document.	

Seal of the bidder

Authorised Signature of the bidder

**FORM '2 (i)'**  
**FINANCIAL INFORMATION**

<b>Part 1: Bankers Details</b>		
a)	Name of Bank	
b)	Address	
c)	City	
d)	PIN	
<i>Details of Contact Person for Verification of Particulars</i>		
e)	Name & Designation	
f)	Phone No.1 with STD Code	
g)	Phone No.2 with STD Code	
h)	E mail	
i)	Fax No	
<b>Part 2: Details of Chartered Accountant / Financial Auditor</b>		
a)	Name of Firm / CA	
b)	Address	
c)	City	
d)	PIN	
<i>Details of Contact Person for Verification of Particulars</i>		
e)	Name & Designation	
f)	Phone No.1 with STD Code / Mobile No.	
g)	Phone No.2 with STD Code / Mobile No.	
h)	E mail	
i)	Fax No	

<b>Part 3: Financial Information</b>								
I. Financial Analysis: Details to be furnished duly supported by figures in Balance Sheet / Profit & Loss Account for the last 5 years duly certified by the chartered Accountant, as submitted by the bidder to the Income Tax department ( copies to be attached)								
		FY ...	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	Average annual turnover.
			1	2	3	4	5	
	Mention whether records are Audited		Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	
(i)	Gross Annual turnover on works.							
(ii)	Similar Works Turnover							
(iii)	Net Profit/ Loss							
(iv)	Net Worth *							
(v)	Assets (Plant & Machinery only)							
(vi)	Working Capital							
* Calculation of Net Worth to be shown in separate sheet.								
II. Financial arrangements for carrying out the works.								
III. The following certificates are to be enclosed.								
(a)	Tax deducted at source, Certificates from the clients for the last five years.							
(b)	Latest Income Tax Clearance Certificate.							

\_\_\_\_\_(Name of Organization) hereby confirms that our Organization complies to the following clause for eligibility document (tick the clause which satisfies, otherwise mark cross in below table)

Clause No. 4 complies	Yes / No	
Clause No. 5 complies	Yes / No	

Signature of Chartered Accountant with Seal

Seal and signature of Bidder

**FORM ' 2(ii) '**

**CERTIFICATE FROM APPLICANT'S BANKERS**

This is to certify that to the best of knowledge and information M/s. /Shri . . . . .  
..... (with address), a customer of our bank, are/ is respectable  
and can be treated good for engagement upto a limit of ₹. . . . . Lakhs (Rupees.....Lakhs).

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

**Date of Issue:**

(Signature)  
For the bank

NOTE:

1. Bankers certificate shall be on letter head of the Bank sealed in cover addressed to tendering authority.
2. In case of partnership firm, certificate shall include names of all partners as recorded with the Bank.

**FORM '3'**

**DETAILS OF ALL WORKS OF SIMILAR NATURE COMPLETED DURING THE LAST SEVEN YEARS ENDING LAST DAY OF THE MONTH JULY 2015.**

<i>NIT *Clause No. complied (refer clause given in below table 2)</i>	<i>Sr. No.</i>	<i>Name of Work / Project &amp; location</i>	<i>Owner or organizat ion</i>	<i>Value of Work at Completi on (Rs in Lac)</i>	<i>Updated gross present value with multiplyi ng factor (rs. In Lac)</i>	<i>Date of commenc ement as per contract</i>	<i>Stipulate d date of completi on</i>	<i>Actual date of completi on</i>	<i>Litigatio n / Arbitrati on pending / in -progress with details</i>	<i>Remarks</i>	<i>Documen t / Attached/ PO/Com plete certificat e scope of work</i>

**\*\*Updated Value of Completion cost =  $Cx(1+7\%)^n$**

Where C is the cost of completion and n is the number of years after completion.  
**Multiplying factors for Cost Updation:**

**Table 1.**

<b>Year of Completion</b>	<b>Multiplying Factor</b>
2013-14	1.07
2012-13	1.14
2011-12	1.23
2010-11	1.31
2009-10	1.4
2008-09	1.5

\* The Above information shall be supported with copies of Award letter / work Order / LOI/complete certificate / phototgraphs.

\_\_\_\_\_(Name of Organization) hereby confirms that our our Organization complies to the following clause for eligibility (tick the clause which satisfies, otherwise mark cross in below table)

**Table 2.**

Clause No. 2 Option-1 complies	Yes / No
Clause No. 2 Option-2 complies	Yes / No
Clause No. 2 Option-3 complies	Yes / No

**Signature of Applicant(s)**

**FORM '4'**

**DETAILS OF PROJECTS UNDER EXECUTION OR AWARDED**

Sr. No.	Name of Work / Project & location	Owner or organization contact details	Value of Work at Completion (Rs in Lac)	Date of commencement as per contract	Stipulated date of completion	Present Status (% completed)	Expected Date of completion	Reasons for slow progress if any	Remarks	Document / Attached/PO/Complete certificate scope of work

Certified that the above list of work is complete and no work has been left out and that the information given is correct to my knowledge and belief.

Signature of Bidder(s)

*\*The above information shall be supported with copies of Award Letter /Work order/LOI/work progress status report / photographs.*



**FORM '5'**

**PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM "3" & "4"**

**CLIENT'S CERTIFICATE REG PERFORMANCE OF CONTRACTOR**

**Name & address of the Client**

.....  
 .....  
 .....

**Details of Works executed by**

.....  
 .....  
 .....

**Contact**

**No.:**.....  
 .....  
 .....

**Email ID:-**

.....  
 .....  
 .....

1	Name of work with brief particulars	
2	Agreement No. and date	
3	Date of commencement of work	
4	Stipulated date of completion	
5	Actual date of completion	
6	Details of compensation levied for delay, if any	
7	Tendered amount	
8	Gross Amount of the work completed	
9	Name and address of the authority under whom works executed	
10	Whether the contractor employed qualified personnel during execution of work?	
11	I) Quality of work (indicate grading - Good, satisfactory, un-satisfactory)	

	II) Amount of work paid on reduced rate basis, if any	
12	I) Did the contractor go for arbitration ?	
	II) If yes, total amount of claim	
	III) Total amount awarded	
13	Comments on the Capabilities of the contractor.	
	a. Technical Proficiency	
	b. Financial Soundness	
	c. Mobilization of adequate T&P	
	d. Mobilization of manpower	
	e. General behaviour	
14	Griha / Leed rating applied for or obtained	
15	Any sub-contractor deployed (Yes / No) If yes, provide list along with general feedback.	

Note: All columns shall be filled in properly.

\*The copy may also be forwarded to email ID [pqcontractors@iimkashipur.ac.in](mailto:pqcontractors@iimkashipur.ac.in)

Signature of the Reporting Officer with Official seal

Countersigned?

Officer of the rank of Superintending Engineer or equivalent

**FORM '6'(Part I)****DETAILS OF PERSONNEL TO BE EMPLOYED FOR THE WORK**

A proposed team deployment chart shall be submitted and CVs of proposed staff shall be enclosed.

Sr. No.	Name	Designation	Regular / Part-time	Qualification	Experience (in years)		Roles & Responsibilities	Projects involved	Remarks
					Total	In Present			

**Note:**

- Any sub-contractor deployed / likely to be deployed, has to be mentioned in above table.

**FORM '6'(Part II)**

**CVs OF PERSONNEL TO BE EMPLOYED FOR THE WORK**

An abstract shall be submitted and CVs of proposed staff shall be enclosed.

**KEY PERSONNEL-**

- 1 Name
- 2 Father's Name
- 3 Nationality
- 4 Address
- 5 Date of Birth.
- 6 Educational Qualification
- 7 Experience

Photograph
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	Company	Duration	Roles and Responsibility
<b>A.</b>			
<b>B.</b>			
<b>C</b>			

**Self Evaluation Data Sheet for construction of permanent campus of IIM kashipur**

S. No.	Clause No.	Name of Company	Mention Company's Name	Organization Name
		Clause Description	1	
1		<b>General Information</b>		
2		<b>Address</b>	Provide complete address details of the company's office that is submitting the bid	
3		<b>Name of Contact Person</b>	Provide company's authorised representative name	
4		<b>Contact Number</b>	Provide company's authorised representative contact number and mobile number	
5		<b>Type of Company</b>	Mention above company's status as Limited / Pvt. Ltd. / Proprietary Company	
6		<b>General Document Provided</b>		
7	Form-1	<b>Power of Attorney</b>	Mention "Yes", when provided along with name & designation of POA holder	
8	Form-1	<b>MOU</b>	Mention "Yes", when provided, otherwise "No"	
9	Form-1	<b>Registration</b>	Mention registration organization name, registration category / class, validity period along with expiry date	
10	Form-1	<b>Date of registration of Company (Working for last 7 years or more)</b>	Mention company's Name, date of registration of company , registration certificate number and date	
11	Form-1	<b>Sale tax / Vat / TIN</b>	Mention Sales tax, VAT, TIN number provided by taxation authorities to company	
12	Form-1	<b>Service tax</b>	Mention Service Tax number provided by taxation authorities to company	
13	Form-1	<b>EPF Registration</b>	Mention EPF registration number provided by PF authorities to company	
14	Form-1	<b>ESI Registration</b>	Mention ESI number provided by ESIC authorities to company	
15	Form-1	<b>PAN</b>	Mention PAN number provided by taxation authorities to company	
16	Form-2	<b>Financial</b>		
17	Form-2	<b>Income tax clearance certificate</b>	Mention "Yes" or "No" for AY 13-14 return acknowledgement provided	
18	4	<b>Average annual turnover (&gt; estimate cost put to tender)</b>	Mention average annual turnover figures in Lacs	
19	5	<b>Loss During last 5 financial year</b> 2014-15 2013-14 2012-13 2011-12 2010-11	Mention year-wise loss in last five financial years. If there is no loss, mention loss as nil.	
20	6	<b>Blacklist Certificate (Notarized affidavit)</b>	Mention whether the company was blacklisted previously and attach confirmation for it in the form of affidavit	
21	7	<b>ISO Certificate (14001-2004 or 9001-2008 or 18001-2007)</b>	Mention the ISO certification valid along with its validity period and expiry date	
22	2 (Form-4)	<b>Eligibility</b>		
23		<b>Project Considered</b>		

24	Option -1	(3 work > 40% estimate cost put to tender Order-a,b,c, (DOC) Actual date of completion / (DOS) Actual date of Start / Order Value (OV)/ client / 01.08.2008----31.07.2015	For similar work no.-1, Mention work order description, Order Value, Order date, Actual date of Start & completion, Actual Execution value, customer feedback provided	
25			For similar work no.-2, Mention work order description, Order Value, Order date, Actual date of Start & completion, Actual Execution value, customer feedback provided	
26			For similar work no.-3, Mention work order description, Order Value, Order date, Actual date of Start & completion, Actual Execution value, customer feedback provided	
27	Option-2	(2 work >60% estimate cost put to tender),Order-a,b,c, (DOC) Actual date of completion/ Order Value (OV) /client / 01.08.2008----31.07.2015	For similar work no.-1, Mention work order description, Order Value, Order date, Actual date of Start & completion, Actual Execution value, customer feedback provided	
28			For similar work no.-2, Mention work order description, Order Value, Order date, Actual date of Start & completion, Actual Execution value, customer feedback provided	
29	Option-3	(1 work > 80% estimate cost put to tender), Actual Date of completion (DOC) / Order Value (OV) / client / 01.08.2008----31.07.2015	For similar work no.-1, Mention work order description, Order Value, Order date, Actual date of Start & completion, Actual Execution value, customer feedback provided	
30	Note	(1 work > 40% estimate cost put to tender), Govt. work order, Actual Date of completion (DOC) / Order Value (OV) / client / 01.08.2008----31.07.2015	Mention work order description, Order Value, Order date, Actual date of Start & completion, Actual Execution value, customer feedback provided	
31	9	Joint Venture or Consortium or Individual Company / Proprietor	Mention company Type	
32	10	Solvency > 40% estimate cost put to tender, certificate after the date of 30th April'2015	Mention solvency value and inform comply it or not.	
33	11	Net Worth >40% estimated cost put to tender for 2014-15 Working Capital >0 & Net worth >0 for the years 2014-2015 2013-2014 2012-2013	Mention net-worth & working capital value and inform comply it or not.	
34	12	Affidavit for developer and integrator of the system.	Mention submitted or not.	
35		Essential Submissions		
36	(iii)	Litigation (< 20% net worth) / Notarized affidavit	Mention "complies / not complies" and affidavit details	
37	Form-1	Organization chart with list of employees	Mention "provided and refer the attachment"	
38		Subcontractor / Supplier required for execution, if any	Mention "provided and refer the attachment", if any	
39	(iv)	Undertaking for not in default of statutory dues	Mention "provided and refer the attachment"	
40	(v)	Liquidated damage or penalties imposed	Mention the required details along with the project name.	
41	(vi)	Undertaking for complying Statutory laws & indemnify Institute	Mention "provided and refer the attachment"	
42		Remark, if Any		

This is inform that the information provided above is true and correct. Also, .....(organization name) hereby inform that our organization satisfies all the eligibility criteria given in the tender document. If any information dis-closed has been found in-correct or in-complete, our organization shall be debarred from the bidding process and we shall not contest it with Institute or its representatives or in the court of law.

Date:

<Stamp & Signature>  
Bidder Name  
Authorised Signatory Name & Designation

## DRAFT AGREEMENT

THIS AGREEMENT made at Kashipur on the \_\_\_\_\_ day of \_\_\_\_\_ 2015 between DIRECTOR, **Indian Institute of Management Kashipur** Bazpur Road, District Udham Singh Nagar , Uttarakhand (hereinafter called "**The IIM Kashipur**" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of the one part AND \_\_\_\_\_ (herein after called "The Contractor" which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) of the other part.

### WHEREAS

The IIM KASHIPUR is desirous of carrying out the construction works related to IT Backbone, Access Control, and Surveillance System (with remote monitoring, maintenance and MIS capabilities) as fully described in the layout drawings and in the tender document.

The Works are to be executed as per drawings and specifications describing the works to be done.

The Contractor has agreed to execute the said works subject to the provisions hereinafter contained and subject also to General Conditions of Contract, Special conditions of contract, Safety Code, Model Rules for the protection of health and Sanitary arrangements for workers, Specifications, Bill of Quantities and milestones (all of which are hereinafter collectively referred to as the 'said tender conditions') and strictly in accordance with the drawings annexed hereto at or for the respective rates set out in the Bill of Quantities amounting to the sum as there under arrived at or such other sums as shall become payable there under (hereinafter referred to as the said tendered amount).

### NOW IT IS HEREBY AGREED AS FOLLOWS:-

1. In consideration of the said tendered amount to be paid by **The IIM KASHIPUR** to the Contractor at the time and in the manner set forth in the said tender conditions and in accordance with the Bill of Payments to execute and complete the work shown upon the said Drawings strictly in accordance with the specifications and bill of Quantities.
2. The said tender conditions and the annexures hereto shall be read and considered as forming part of this contract and the parties hereto shall respectfully abide by to the

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said conditions and perform the agreement on their part respectively contained in the said conditions.

3. The following documents shall be deemed to form and be read and construed as part of this agreement that is:
  - i. Letter of Acceptance / Work award letter
  - ii. The said bid
  - iii. The general conditions of contract
  - iv. The special conditions of contract
  - v. Specifications
  - vi. Drawings
  - vii. Priced bill of quantities
  - viii. Payment Terms Summary
  - ix. Documents submitted for technical qualification
4. This contract on item rate basis to be carried out and to be paid for according to the rates contained in the Bill of Quantities.
5. The contract herein contained shall comprise not only the works mentioned above but all subsidiary works connected therewith within the same site as may be ordered to be done from time to time by the said Engineer-In-charge for the time being, even if such work may not be shown on the said Drawings or described in the said Specifications and Bill of Quantities.
6. The IIM KASHIPUR reserves to themselves the right of altering the drawings and the nature of the work by adding to or omitting from the scope of work any item of work or portions of the same without prejudice to this contract.
7. Time shall be considered as the essence of this contract and the Contractor hereby agrees to commence the work within 15 days from the date of letter of acceptance, as provided for in the said terms and conditions, and shall complete the entire work within the specified period, subject nevertheless the provisions for extension of time as may be agreed to by the IIM KASHIPUR and as contained in the said conditions.
8. All payments by the IIM KASHIPUR under this contract shall be made only at KASHIPUR.
9. All disputes arising out of or in any way connected with this contract shall be deemed to have arisen at KASHIPUR and courts in Kashipur (or Nainital High court)



only shall have jurisdiction to determine the same.

10. That the contract and several parts of this contract have been read by the contractor and fully understood by him. The contractor shall not be entitled for payment beyond tendered quantities unless ordered specifically by written instructions of Director IIM KASHIPUR.
11. This contract shall be signed in duplicate, the original whereof shall be kept in the custody of the IIM KASHIPUR, the duplicate with the Contractor.

**IN WITNESS WHEREOF the IIM KASHIPUR** has set his hands hereunto and one duplicate hereof through his duly authorized official and the Contractor has caused these presents and one duplicate hereof under his common seal by his duly authorized representative at the place and on the date month and year first herein above written.

SIGNED, SEALED AND DELIVERED by IIM KASHIPUR, by the hand of

Signature:

Name:

Designation:

**IN THE PRESENCE OF**

(1) Signature:

Name:

Address:

(2) Signature:

Name:

Address:

SIGNED, SEALED AND DELIVERED BY the Contractor M/s.

---

Signature:

Name:

**IN THE PRESENCE OF**

Designation:

(1) Signature:

Name:

Address:

(2) Signature:

Name:

Address:

## Check List of Documents (to be attached)

Sr. No.	Information	Confirmation of Submission			
		Hard Copy		Soft Copy	
		Yes / No	Page No.	Yes / No	Folder Name
<b>Form-1</b>					
1	Proof of constitution :	Y/N		Y/N	
	a) In case of sole proprietorship / HUF : an affidavit executed before a 1 <sup>st</sup> Class Magistrate that the Bidder is the sole proprietor of the firm/Karta of HUF.	Y/N		Y/N	
	b) In case of partnership firm: (Submit attested copies) Partnership deed attested by Notary Public	Y/N		Y/N	
	• Form "A" or equivalent form issued by Registrar of Firms				
	• Form "B" or equivalent form issued by Registrar of Firms				
	• Form "C" or equivalent form issued by Registrar of Firms				
	c) In case of Private/Public Ltd Co. Memorandum and Article of Association duly attested by Notary Public.	Y/N		Y/N	
	Power of attorney, if any , attested by Notary Public				
2	Certificates of Registration as contractor	Y/N		Y/N	
3	Certification of Registration with taxation authorities	Y/N		Y/N	
4	Certificates of Tax Clearances (ITCC, VAT, Service Tax etc)	Y/N		Y/N	
5	Details of requisite licenses	Y/N		Y/N	
6	Registration with EPF / ESI	Y/N		Y/N	
<b>Form-2 (i) &amp; (ii)</b>					
7	Financial Information (certified by chartered accountant)	Y/N		Y/N	
	a) Balance Sheets for last 5 years	Y/N		Y/N	
	b) Solvency Certificate (from banker)	Y/N		Y/N	
<b>Form-3</b>					
8	Details of Completed Works	Y/N		Y/N	
	a) Attested Copies of award letters/ work Orders/ LOI for completed works/Photograph	Y/N		Y/N	
	b) Original or attested copies of certificates for works done, from concerned clients	Y/N		Y/N	

<b>Form-4</b>					
9	Details of On-going works	Y/N		Y/N	
	a) Attested Copies of award letters/ work Orders/ LOI for on-going	Y/N		Y/N	
	b) Work progress status report / photograph	Y/N		Y/N	
	c) Value of work balance	Y/N		Y/N	
<b>Form-5</b>					
10	Client's Certificates regarding performance of contractor	Y/N		Y/N	
<b>Form-6 (I &amp; II)</b>					
11	Team Deployment Chart	Y/N		Y/N	
	Details of Personnel to be employed for the work	Y/N		Y/N	
		Y/N		Y/N	
<b>Self Evaluation Data-sheet</b>					
<b>General Checks</b>					
12	Affidavit for developer and integrator of the system.	Y/N		Y/N	
13	Affidavit of affirmation, in original, (duly notarized) on litigations as per Clause 2.3(iii) of Eligibility Conditions	Y/N		Y/N	
14	Affidavit of affirmation, in original, (duly notarized) to the effect that the firm has not been blacklisted as given in Clause 2.2.6 of Eligibility Conditions	Y/N		Y/N	
15	Undertaking that all taxes are clear and there are no outstanding dues.	Y/N		Y/N	
16	CD/DVD containing all submittals in digital format.	N.A.	N.A.	Y/N	
17	ISO 9001:2008 ISO 14001:2004/18001:2007 certificate(If available)	Y/N		Y/N	
18	Griha-3 or Leed gold certified building / campus (if available)	Y/N		Y/N	
19	Declaration (on its letter-head) that the bidder has visited the site and assessed all its risks & cost	Y/N		Y/N	
20	Declaration (on its letter-head) that the bidder satisfies all the eligibility requirements given in the tender document	Y/N		Y/N	
21	Bid Processing fee	Y/N		Y/N	
22	Earnest Money Deposit	Y/N		Y/N	
23	Signed and stamped complete tender document along with addendum / corrigendum/ reply to bidder's queries	Y/N		Y/N	
24	Priced Bid document	Y/N		Y/N	

Note: Folder name for CD / DVD to be provided by the Bidder.