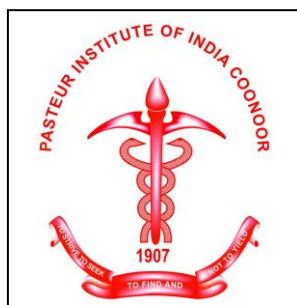


PASTEUR INSTITUTE OF INDIA, COONOR



Tender No. PII/ADVT/005/2020 Dated 08/06/2020

Tender Document for the Supply, Installation, Testing & Commissioning of Clean Room and Non-Clean Room IP based CCTV systems, Access Control systems, back-up Systems and Comprehensive Annual Maintenance Contract for 3 years at Pasteur Institute of India, Coonoor (PIIC).

| INDEX | | |
|-------------------------------|--|-----------------|
| S. No | Description | Page No. |
| 1 | Introduction | 2-5 |
| PART – 1 Technical Bid | | |
| 2 | Section I - Bidders' Qualification Criteria, Bid Evaluation Criteria & Bid Rejection Criteria and Introduction to Vendor | 6-17 |
| 3 | Section II- General Conditions of Contract | 18-29 |
| 4 | Section III - Special Condition of Contract, Technical Specifications, Technical Specifications (Appendix-A and B) | 30-61 |
| 5 | Section IV - Statement of credentials | 62-66 |
| 6 | Section V - BG format for EMD/ BID SECURITY | 67-68 |
| 7 | Section VI - BG format for Security deposit / performance security | 69-70 |
| 8 | Section VII – Integrity Pact | 71-78 |
| 9 | Section VIII - Self – Declaration of Blacklisting | 79 |
| PART – 2 Financial Bid | | |
| 9 | Bid Format | 80-82 |

Last Date for Bid Submission: 29/06/2020 at 15:00 Hrs

INTRODUCTION

Pasteur Institute of India is an autonomous institute under the Ministry of Health and Family Welfare, Government of India producing DPT group of Vaccines and supply to Government of India. The Pasteur Institute of India is spread in 16.5 acres of Land. It has state of the art cGMP facility comprising of 9 separate blocks.

Objectives of the Project

Pasteur Institute of India, Coonoor intends to implement CCTV surveillance & Access Control System. The surveillance system will cover all the major points, entry/exist gates, and Laboratories for constant watch, visual verification, security, safety and Live monitoring of activities in the various locations and other vulnerable places from the point of view of crime & corruption prevention & detection, to check the activities of mischievous elements and to check alertness of Security Guards/Personnel on duty and their locations. This system shall bring transparency in the system and also avoid manipulation of entries and thus shall effect the operations of PII Coonoor. The system will be helpful in:

- a) Monitoring the movements of vehicles and staffs at specific locations for the purpose of detection of any damages and illegal practices
- b) View occurrence of any incident, detection and effective management in real time
- c) View/ analyses incidents, which have occurred in the past for the purpose of appropriate action
- d) Detect/track movement of a specific person(s) having link with any incident or activity.
- e) Identification of disaster/emergencies/activities and response thereon.

The scope of work involved is detailed in the subsequent paragraphs and is precise to the extent possible. **However, it is expected from the supplier to consider and supply all those items mentioned in PART -2 (Financial Bid) also if any additional items required for successful installation and commissioning of the instrument / system.**

SCOPE OF WORK

The scope of work is **Supply, Installation, testing & commissioning of Clean Room & Non-Clean Room IP based CCTV systems, Access Control systems, back-up Systems and Comprehensive Annual Maintenance Contract for 3 years at Pasteur Institute of India, Coonoor** as per the technical specification given in the Bid Document.

IMPORTANT DETAILS AS FOLLOWS:

| S.No. | Description | Schedule |
|-------|--|--|
| i. | Closing date & time for receipt of Tender | 29/06/2020 by 15:00 Hrs |
| ii. | Time and date of opening of Technical Bids | 30/06/2020 by 15:30 Hrs |
| iii. | Pre-Bid meeting Details: | Date & Time: 19/06/2020 by 11:00 Hrs PASTEUR INSTITUTE OF INDIA, COONOOR – 643 103 |
| iv. | Venue of opening of Tender | PASTEUR INSTITUTE OF INDIA, COONOOR – 643 103 |
| v. | Tender Document Fee | Rs.2000/- (Non-refundable) |
| vi. | Earnest Money Deposit(EMD) | Rs.2,00,000/- |

The bids are invited for the Supply, installation & Commissioning of clean room and non-clean room IP based CCTV systems, Access Control systems, backup systems and Comprehensive Annual Maintenance Contract for 3 years as per specification and other details given in the bid document. All bidders who qualify the eligibility conditions as detailed in the bid document are eligible to participate except in the case of firms who are blacklisted / barred by competent agencies in participation and award of such contracts.

Note: Date and time of opening of the Price bids shall be communicated to qualified bidders subsequently.

Technical Bid

Technical Bid includes all documents that are called for as per Bidder Qualification Criteria (BQC) of this Tender Document (Section I of Technical Bid). All the pages of this tender document should be duly signed and affixed with seal of the firm towards acceptance of all terms and conditions of all sections of the tender document.

Financial Bid

- a) Financial Bid shall be submitted in the same format as attached along with this Tender document duly signed and affixed with and seal of the firm. The quoted value in Rupees in digits should also be written in words. In case of discrepancy between value in digits and value in words, ***PIIC shall consider the value written in words ONLY.***
- b) An 'Earnest Money Deposit / Bid Security' (EMD/ BID SECURITY) shall be enclosed in a separate envelope along with the Technical Bid by way of Demand Draft in favour of '***Director, Pasteur Institute of India, Coonoor,*** payable at Coonoor. Bidders are permitted to submit Bank Guarantee (BG) issued by any nationalized/scheduled bank as per enclosed format towards EMD/ BS (Earnest Money Deposit / Bid Security) instead of Demand Draft. However, such BG shall be valid for a period of minimum 120 days from the due date of bids submission at PIIC.
- c) Bids received without EMD/ BID SECURITY and bids received after due date of bids submission shall be summarily rejected. No further communication in this regard is entertained by PIIC.
- d) The details of Bidder Qualification Criteria (BQC) are given in the Section I. Bidders are advised to refer to the same. If required, Bidders should get clarified of their doubts during understanding the tender documents with PIIC and subsequently submit their quotes/tenders to PIIC. **In order to familiarize with nature and quantum of job; it is informed to all Bidders / Tenderers to visit the location before submission of their quotes and should get clarified all their doubts in contact with PIIC.**
- e) Financial Bid envelope contains Financial Bid format for each item and to be quoted by the Bidders as per their choice depending on their experience of work handled. After mentioning their quotes against the items in the format, the document shall be signed, stamped with firm name. The finance bid document shall be kept inside the Financial Bid envelope and the envelope to be sealed with gum properly.
- f) **Technical Bid Envelope** and **Financial Bid Envelope** should be sealed properly with gum/tape and to be mailed to PIIC writing the Tender No. and Due date on top of the envelope. The Bidder should ensure that his quotation reaches PIIC on or before the Due date as mentioned in PIIC Tender Document for consideration.

The bid envelop can be sent to PIIC to the address below:

The Director,

Pasteur Institute of India,

Coonoor – 643 103, The Nilgiris, Tamilnadu

Or preferably hand over to the Administration Department of PII, Coonoor.

PIIC reserves the right to reject any or all bidder's quotes/tenders or to accept in part of offers given by Bidders/Tenderers without assigning any reason thereof. Decision of PIIC in this regard will be final and binding on all the Bidders/Tenderer.

Note: The Vendor should fill the Statement of Checklist given in the Annexure – 1 (Section – 1) and attach the same with Top of the Tender Document

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(Dr. S. Sivakumar)

Director.

PART -1

SECTION – I

Bidders' Qualification Criteria (BQC)

- a) The bidder shall have at least 3 years experience in successfully handling Supply, installation & Commissioning of clean room and non-clean room IP based CCTV systems, Access Control systems and their backup systems and Comprehensive Annual Maintenance Contract for 3 years in any Pharma/Vaccine or other company (vendor with previous experience in Pharma/Vaccine company shall have more advantage). Bidders should furnish notarized copies of work orders and completion certificate issued by respective organizations for the same to this effect.
- b) The bidder should have average annual turnover of not less than Rs.2 cores during the last 3 years. Relevant documentary evidence certified by CA to be submitted.
- c) The bidders who are blacklisted by PIIC /Central Govt. /State Govt. /Public sector undertaking are ineligible to participate in this tender. Bidder should attach notarized declaration to confirm his eligibility to this effect.
- d) Experience of having successfully completed one single order of the Supply, installation & Commissioning of clean room and non-clean room IP based CCTV systems, Access Control systems and their backup systems and Comprehensive Annual Maintenance Contract for 3 years at any Pharma / Vaccine company or other company during last 2 years in which tenders are invited for value not less than Rs.50 Lakhs. Copy of work order along with completion certificate to be submitted with technical bid.
- e) Relevant documentary proofs like Audited Profit and loss account for turnover details, work order copies and completion certificates required to enclose notarized copies for above points to be provided.

Bid Evaluation Criteria

The bidder shall accept in to the technical specification & scope of work given in the tender.

First Step

Opening of Envelope which is Containing Tender Document Fee and EMD. The Tender Evaluation Committee will first verify the Demand Draft/PO/FDR for EMD is in order and as per requirement of the bid.

Second Step – Evaluation of eligibility bid

The eligibility bid will be evaluated as per **Bidder Qualification Criteria**

Third Step – Opening of Technical Bid & their evaluation.

- a) The technical bid will be evaluated on the basis of the minimum technical specifications & features of the equipments / system as mentioned in the Technical Qualification. After evaluation of technical bids by Proposal Evaluation Committee, the vendor, who meet the requisite criteria, will be short-listed.
- b) When deemed necessary, Committee may seek clarifications on any aspect of their bid from the vendor. However, that would not entitle the vendor to change or cause any change in the substance of the tender submitted. This would also not mean that their proposal quote has been accepted.
- c) The decision of the Committee in the evaluation of responses to the PIIC shall be final. It is mandatory for the vendor to quote for both the CCTV, Access Control systems (inclusive of Software and standard accessories) installation & commissioning and Comprehensive Annual Maintenance Contract (CMC) charges. If it is found that the vendor has not quoted for all the items his financial offer will be rejected and he will not be eligible for award of contract. No correspondence will be entertained outside the process of negotiation/ discussion with the Committee.

Fourth Step – Opening of Financial Bid of Technically Eligible vendors

- a) Commercial bids of only those vendors will be opened, whose technical bid was found satisfactory Such commercial bids will be opened by the Tender Committee in presence

of the vendors representatives, who choose to attend can do so, at the given time, date and venue. The vendor with lowest financial bid based on total cost including Supply, installation & Commissioning of clean room and non-clean room IP based CCTV systems, Access Control systems and their backup systems and Operation and Comprehensive Annual Maintenance cost for **03 years**), will be considered as L-1.

- b) The L-1 will be evaluated adding tender amount for Supply, installation & Commissioning of clean room and non-clean room IP based CCTV systems, Access Control systems and their backup systems and Operation and Comprehensive Annual Maintenance cost for 03 years.
- c) It will be obligatory upon the vendor to make the supply of all the items as per terms and conditions of contract. Any item left but necessary for successful completion of project shall deemed to be included in the cost and nothing extra shall be paid. On refusal of the supply and execution to the satisfaction of department, the Contract of the company will be cancelled, Security Deposited will be forfeited and other appropriate action as deemed fit will be initiated.

Bid Rejection Criteria

- a) Offers received after the due date / time will be rejected.
- b) Techno-commercial offer without Tender Document Fee/EMD/ BID SECURITY will be rejected. However, PSU's / firms registered with NSIC/MSE vendors registered with District industries Center (DIC) are exempted from submission of Tender Document Fee /EMD/ BID SECURITY. Necessary document should be attached.
- c) Non-compliance to any of BQC will be liable for rejection.
- d) Non adherence to technical / commercial terms and incomplete bids and bids in deviation to tender conditions will be liable for rejection.

General Instructions

- a) Due to security reasons, no China based Original Equipment Manufacturer (OEM) or Chinese organizations registered in anywhere are not allowed to participate in this tender. Declaration for the same on OEM letterhead should be submitted.

- b) Due to Security reasons products from the adversary countries or having their origin from those countries are not to be quoted. Declaration for the same on OEM letterhead should be submitted.

Award the work

The work shall be awarded to L-1 only as per Bid Evaluation Criteria

Validity of Proposal

The proposal is valid for a period of four months (i.e. (120 days) from the date of submission of bid and rates finalized with this tender process will be valid till the validity period of the contract with the service provider i.e. one year. The committee may seek confirmation of the vendor for the extension of validity beyond validity period.

Important notes

- a) PIIC reserves the right to accept or reject unworkable rates of any or all tenderer at any stage of the tender evaluation process at sole discretion of PIIC without assigning any reason thereof.
- b) PIIC reserves the right to take any appropriate decision as deemed fit based on the findings of tender evaluation. Decision of PIIC shall be final and binding on all the bidders in this effect. Bidders shall have to produce all original documents at specified time and place as demanded by PIIC during tender evaluation process and during execution of the contract.

INSTRUCTION TO VENDOR

The vendor shall bear all costs associated with the preparation and submission of the Notice in Tender (NIT). The department in any case will not be responsible or liable for these costs. The vendor is advised to study the Notice in Tender (NIT) Document carefully. Submission of the NIT shall be deemed to have been done after carefully studying and examination of all instructions, eligibility criterion, terms and requirement specifications contained in the NIT document with full understanding of its implications. Failure to furnish all information required in the NIT Document in all respects will be at the company's risk and may result in the rejection of the Tender.

Description in general:

The System proposed is IP based CCTV System for clean and non clean rooms. The objective is to provide high degree of IP based Electronic surveillance to the entire Premises at the identified locations. It is also essential to have recorded images of all cameras and Data's of Access Control System to be stored at least for 60 days to facilitate investigations of a reported case. The scope of work includes supply, installation, testing & commissioning of IP CCTV system and imparting training to concerned officials in connection with IP CCTV system including all components, and Comprehensive Annual Maintenance Contract for 3 years. All instrument and materials used shall be complied with BIS standard (IS 13252 - 1:2010) or equivalent and clean room compliant wherever applicable.

Overview of the system

Proposed system consists of 44 Nos of Clean Room IP based Camera, 95 Nos of Non-Clean Room IP based Cameras, 23 Nos of Clean Room Access Control System, 43 Nos of Non-Clean Room Access Control System and required numbers of NVRs/Servers, software's, Switches, Storage, Workstations, Monitors, Biometric unit, Electro Magnetic Locks, Power Cables,/OFC/CAT-6, Server Racks, Centralized Monitoring and Control System etc. The control room which is proposed for PIIC shall have the instrument to monitor and control the entire system.

The vendor shall supply, install, test & commission and handing over the system and Comprehensive Annual Maintenance Contract for 3 years. The viewing angles, clarity, and all the technical and general specifications etc. shall be shown to PIIC to its satisfaction before finalizing the location, zoom and angle, etc. The specifications of all components shall be strictly followed and shall be as per given technical specifications or better.

Annexure – 1

Statement of Checklist

| S.No | Documents Required | Submitted(Yes/No) |
|------|---|-------------------|
| 1. | Technical Bid (Eligibility) Documents | |
| 2. | Financial Information as per Annexure – 2 (Section – IV) | |
| 3. | Statement of Experience as per Annexure – 3 (Section – IV) | |
| 4. | Signed Statement of Manpower Available as per Annexure – 4 (Section – IV) | |
| 5. | Earnest Money Deposit that be in DD/PO/FDR or Bank Guarantee Proforma For Earnest Money Deposit / Bid Security as Per Section - V | |
| 6. | DD/PO/FDR or Bank Guarantee Proforma for Security Deposit / Performance Security as per section - VI | |
| 7. | Integrity Pact as per Section - VII | |
| 8. | Self-Declaration of Blacklisting as per Section - VIII | |
| 9. | Copies of certifications with company seal and authorized signatory's signature | |
| 10. | Financial Bid as per Section - IX | |
| 11. | OEM Manufacturing Authorization letter for CCTV and Access Control System | |

Signature, Name and Designation of authorized signatory

Site Inspection

The vendor shall inspect and analyses the site and acquaint himself with the site conditions, working hours and all relevant items connected with execution of work. The vendor is advised to study the tender documents, concerned specifications and other instructions carefully.

Site Preparation

The site for installation of the system shall be provided by the PIIC as per the required environmental conditions before the installation of the system. Vendor shall prepare the suitable plan as per the project requirement for installation of network, CCTV camera, biometric units, electromagnetic locks, softwares, display devices, Command & Control Software, servers and its data backup system and other required equipments including LAN setup, electrical/power points with appropriate earthing and ceiling/pole/base/mount for fixing and connecting the equipment and putting sign boards of being under surveillance. Earthing arrangements for all the equipments shall be the responsibility of the supplier and to be carried out as per standard procedures. PIIC shall provide required space for installation of equipment and provision for raw power supply for the installation of equipments and cameras, control devices as well as control centers. A single display unit at Officer-in-charge room of the respective department/block shall display up to 32 video feeds at a given time and may be adjusted according to required number of feeds to be displayed at control center and number of display units installed.

Display of multiple camera feeds

One display screen shall display 64 video feeds at a time from single or multi location. Display of Feeds may be customized either to display all feeds or random display of some feeds at control center. Time duration of rotating display should be 3 minutes. However, user shall be allowed to select and view specific camera(s) if required. Number of display units required shall be based on total number of cameras pertaining to the control center.

Storing and Retrieval of Video at Control Centre

Video feeds of all cameras shall be stored at local control center (24x7) of respective locations for at least 60 days. Data at local center shall be stored at minimum 1080P resolution, 25 FPS with H.265 compression or higher on 24x7 Basis compressions. However, PIIC may change resolution, FPS, Storage duration based on Motion Detection, time slot, etc., according to the requirement. All stored video feeds/clipping can be retrieved / viewed later based on location, camera, date and time.

Navigation System

User shall be able to control the live as well as stored view of all cameras. Facility should be provided to enlarge the screen if required.

Monitoring and Reporting of issues

Monitoring officers at Control Centre shall view the feeds from various locations. If any irregular activity is identified by the monitoring officers at the Control Centre, monitoring officer shall store the feed and communicate the issue manually. Vendor shall provide facility to select and store video streams of a particular camera displayed on screen permanently for specified time period. In addition, Critical alerts detected and received by the system shall be automatically forwarded to defined escalation matrix over E-mail or through mobile app via push notifications. Artificial Intelligence (AI) based Video Analytics will be provisioned and activated at certain specified locations. Records of alerts generated shall be kept in a data base and viewed on the event screen of the main command control.

Internet connectivity

PIIC shall provide the connectivity if required for the monitoring of operations at off site.

Mobile View

Vendor shall make provision to navigate and view the camera feeds for authorized PIIC users on their mobile phones.

Security and access Mechanism of Stored Data

Vendor shall provide secure access mechanism for stored data and live feeds. Only authorized PIIC users shall be able to access/view/copy/delete the video feeds based on user roles. Audit trail should be maintained and should not be tampered in any situation.

Power Backup

All equipments should have sufficient power backup to support one hour of operations. The UPS power supply shall be provided by PIIC.

Insurance of equipments

The Selected vendor shall insure all the deployed equipments to mitigate the chances of the damage, theft and other equipment issues. The expense of insurance shall be borne by the vendor.

The selected Firm/contractor shall replace the required equipment immediately and process the claim with insurance agency subsequently.

Local Connectivity

The selected vendor shall be responsible for end-to-end implementation of local connectivity/LAN/audio link required between camera location and control center.

Operation Support

The selected vendor shall provide the technical and functional support for smooth functioning of the project throughout the warranty and CAMC period. Selected vendor should provide support professionals as mentioned below:

| S.No | Description of work | Nos of Professional Required |
|-------------|--|-------------------------------------|
| 1 | Support Manager Resident Working hours: 8 Hours in Day Time and 6 days in a week. | 1 |

Support manager shall be responsible for co-ordination of smooth functioning of system between vendor and PIIC managing the overall support operations. He shall ensure that sufficient support professional are available for 24x7 operations.

Training

The contractor shall provide adequate training to the PIIC personnel to operate defects rectification and maintain the CCTV system. The Contractor and the PIIC shall jointly agree the number of staff to attend the training courses. For all the active components/ instrument, namely; CCTV cameras, software's, server, network switch, and Network attached storage device, the Original Equipment Manufacturers (OEM) shall provide a certificate, indicating the end of life and end of support in form of spares etc. The product selected should conform to the tender specified life period. Further, all software provided for the above system, including operating system, video management software, client software etc. should be upgraded, if necessary, as and when a new upgrade is released by the developer/ OEM at no extra cost during the tender specified life period of the above system. A certificate, confirming the above, shall be submitted from the respective developers/ OEMs along with Part-I as per the proforma specified in the tender.

Demonstration of Instruments at site

The Vendor shall organize the physical demo at PIIC site for the each type of instruments to be installed prior to execution of project.

Site Acceptance Test

PIIC shall have the right to inspect or test the items/system to confirm their conformity to the correctness and specifications. After completion of installation of CCTV surveillance system and Access Control Systems, vendor shall inform PIIC to conduct acceptance test. The acceptance test will be conducted on full system performance requirements as mentioned below:

Performance Requirements

- a) The Video Management System should be a scalable, simple to use and effective system that should use latest technology for delivering clear pictures and detailing on 24x7 basis of operation. It should have the following minimum operational features:
- b) All Systems (VMS, ANPR, Alarms from ANPR) should be integrated to single Command & Control Interface for seamless operation. (ANPR will be designed to function efficiently on all kind of number plate.
- c) All cameras to have an Auto Focus Motorized lens for easy maintenance and constant clarity
- d) All cameras should have a minimum 64 GB SD card installed, so that in case of the network breakage, the system should guarantee a 24 hours recording on the Data Card.
- e) The camera should restore the data recorded in SD Card to NVR when the network/NVR is restored, so that high availability of recorded data is achieved.
- f) The outdoor Bullet cameras should have a de-fog feature, so that the camera keeps working in foggy environment.
- g) All cameras installed outside should be certified for Vandal Resistant (IK10) and Weather proof (IP66).
- h) The Network Video Recorder (NVR) should be a high performance recorder that should allow redundancy at three levels:
 - 1) Redundancy for Data (RAID 0/1/5/10) and configured for RAID5, Redundancy for Power (Dual Redundant Power Supply), Failover (N:1) Hardware Redundancy

- i) The NVR will be installed in the Command & Control Room and Alerts on detection of a blacklisted person should be displayed as an Alert on the NVR Screen.
- j) For data and security, compliance of following points shall be ensured
- k) The Cameras/NVR/VMS should not have any plain text authentication information stored in the system. It should be stored in Encrypted form. (An undertaking from OEM to be secured and enclosed with the Bid)
- l) The communication between VMS, Clients and Camera should be encrypted with a minimum 64 bits encryption.
- m) Cameras should be able to upload Encryption Certificates (self – signed) for creating a secure communication channel between devices

Responsibility of Completion & Software Optimization

Any fitting or items which may not be specially mentioned in the specifications but which are necessary to be provided by the vendor without any extra charge for completeness of the work under this Tender.

Material of Construction

The vendor shall ensure that the CCTV camera and biometric units to be installed in clean rooms should be **CLEAN ROOM COMPATIBLE**.

Preventive Maintenance

Regular preventive maintenance visits shall be made by the firm ONCE IN A MONTH to ensure up keeps of the system. Any fault brought to the vendor notice either during such routine calls, emails, post or otherwise informed by Control Room officials, shall be arranged to be responded within six hours. The preventive maintenance of the system should be carried out in the presence of PIIC staff. The preventive maintenance of the CCTV system includes cleaning all the equipments and checking the individual/complete performance of equipment's of the CCTV system. The vendor shall ensure the proper working recording of the video obtained from the CCTV cameras and necessary backup has to be taken in the form of DVD / CD or HDD in the regular interval as instructed by Control room in charge. The provision of DVD / CD or HDD shall be in the scope of work of tender. The service engineer of the vendor attending to maintenance shall monitor the environment in which the hardware is working and forewarn the control room in charge of any factor detrimental to the satisfactory performance of the hardware.

A schedule for preventive maintenance shall be drawn by the vendor and submitted to the PIIC well in advance. It will be in such a manner that all the equipment falling within the preview of the contact is covered in a systematic manner.

Maintenance of Service Register

The vendor shall upkeep the service / maintenance record for all the units and Peripherals with the Following details.

- a) Location of the Unit.
- b) Name of Equipment.
- c) Date of Periodical Maintenance attended.
- d) Due date for next periodical Maintenance.
- e) Nature of Defective noticed.
- f) Details of defect attended with date.
- g) Name of service Engineer.
- h) Name of the In-Charge of PIIC Staff with signature and office seal.

Comprehensive Annual Maintenance Contract

A Comprehensive CAMC will include replacement of all defective parts or assemblies of equipment, one mandatory visit per month for preventive maintenance besides the emergency calls. Complaints will be attended within 24 hours of lodgment by the vendor. No additional charges/conveyance will be paid in this regard **after expiry of two years of satisfactory warranty service, the vendor has to undertake, comprehensive CAMC for, 3rd, 4th & 5th year of the instrument/system.** Comprehensive CAMC will include quarterly mandatory visits and repairs and replacements of parts or assemblies, if needed, to put the system in operation. All complaints shall be attended to within 24 hours of the complaint. CAMC charges will be made after the end of each quarter and NOT IN ADVANCE. The vendor will not outsource the maintenance work assigned by the department, to any second party and will arrange attending of all complaints registered by the PIIC officials through its own service / support infrastructure or OEM's service center. The PIIC reserves the right to terminate the comprehensive CAMC by issuing one month's notice to the concerned vendor, if the services rendered by the vendor are found unsatisfactory.

SECTION – II

GENERAL CONDITIONS OF CONTRACT (GCC)

General Guidelines

- a) Bidders shall submit tender in the prescribed format provided by PIIC only.
- b) Bidder shall strictly adhere to the terms & conditions and specifications prescribed by PIIC. Special conditions (if any) submitted along with this tender documents by the bidder will not be accepted by PIIC and will lead to technical disqualification.
- c) All entries in the tender must be written in permanent ink or typewritten without use of eraser or overwriting. Corrections if any should be attested under the full signature of the Bidder.
- d) All the Rates given in the Tender must be expressed both in words and in figures and in case of difference between the two, the rates given in words would be final and considered correct.
- e) All Bidders are required to read the terms & conditions of this Tender document carefully and return one set duly signed on each page by them as token of having read, understood and accepted the terms & conditions along with information called for by PIIC.
- f) All Bidders are required to give details in the Performa attached and attach to Technical bid.
- g) Bidder should have independent ESI & PF code provided by Employee State Insurance Corporation (ESIC) and Employees Provident Fund Organization (EPFO). The details should be enclosed along with the technical bid. However, in the event of non-availability of PF code at the time of submitting the bid, the successful bidder shall obtain the same within 30 days from the date of commencement of the work and an undertaking to this effect shall be enclosed.
- h) All safety gadgets, Uniforms shall be given to the employees engaged by the successful bidder at his own cost as per standard safety norms and also PIIC requirements.
- i) Bidders will be communicated by Post/Email/Fax regarding the date and time fixed for submitting counter offer at PIIC.

Earnest Money Deposit / Bid Security

- a) **Tender submitted without requisite amount of Tender Document Fee/ EMD/ BID SECURITY will be rejected.**
- b) **PIIC reserves the right to reject any tender or all the tenders without assigning any reason whatsoever.**
- c) **The Bidders or their representatives with necessary authorization letter can be present during the technical bid opening / Pre bid conference.**
- d) PIIC will not be responsible for loss or late / non receipt of tender documents.
- e) No interest shall be payable on Earnest Money Deposit / Bid Security.
- f) EMD/ Bid Security shall be paid by bidders in the form of Demand draft or Pay Order drawn on Scheduled Bank in favour of Director, Pasteur Institute of India, Coonoor or Bank Guarantee (BG) in prescribed enclosed format and issued by any scheduled / Nationalized Bank with a validity period of 120 days from the bid closing date. The DD / Pay Order / BG shall be put in a separate sealed cover. Payment in other mode such as Cheques / cash etc. towards EMD/ BID SECURITY will NOT be accepted.
- g) **Earnest Money Deposit / Bid Security (EMD/ BID SECURITY) is liable to be forfeited if, Bidder withdraws or modifies his offer in full or part during the validity period of the offer or does not accept Purchase /Work Order if, placed by PIIC or Does not confirm acceptance of the order within the stipulated time after placement of order or If documents submitted along with the bid are found false, fabricated etc during execution period of the order.**
- h) The bidder registered with NSIC/MSME for the item tendered are exempted from payment of Tender Document Fee/ EMD/ BID SECURITY.
- i) Earnest Money Deposit / Bid Security will be refunded to all unsuccessful Bidders without any interest within 15 days from the date of finalization and awarding of work order to the successful bidders.
- j) If, the successful bidders commence work and also deposit the security deposit / performance security with PIIC in the prescribed format within the specified period, PIIC shall return Earnest Money Deposit / Bid Security paid by bidder without any interest thereon within 15 days of issue of work order.

Price Bid Validity and Bid Opening

- a) Bidders are requested to carefully study all the tender documents along with the Terms and conditions so specified therein before quoting their rates as no alteration in the rates quoted by bidders will be allowed.
- b) The rates quoted by the successful bidders shall remain firm during the validity period of the work order, except for imposition of any new statutory levies / taxes / duties on Services if applicable. The rates quoted by the bidders shall be inclusive of all currently applicable duties, taxes and charges except GST. GST shall be payable extra on the rates quoted by bidders at applicable statutory rate.
- c) The rates quoted by the bidders against this tender shall remain valid for a period of **120 days** from the date of opening of price bid. After evaluation of price bid and awarding of work order to successful bidder, the rates quoted by the successful bidder shall remain valid for the full validity period of the contract including the extended period, if any.

Acceptance of Tender

PIIC reserves the right to accept or reject in part or whole, any or all the tenders received without assigning any reason, whatsoever. PIIC is not bound to accept the lowest tender and also reserves the right to split the tender if deemed fit. The decision of PIIC in this regard shall be final and binding on all bidders.

Commercial Terms

Security deposit / performance security

- a) **Successful Bidders shall be required to furnish security deposit / performance security within 15 days of issuance of LOA / Work order by PIIC and before commencement of work. Amount of Security deposit / performance security shall be 10% of the work order value. The SD shall be deposited by successful bidder in the form of Bank Guarantee/Demand Draft/Fixed Deposit . The Bank Guarantee shall be drawn on any Nationalized / Commercial bank as per standard Performa provided with by PIIC, DD and FD should be in favour of The Director, Pasteur Institute of India, Coonoor and shall remain valid for a period of six months beyond maximum possible validity period of the contract work order.**

- b) PIIC will not pay any interest on security deposit / performance security under this contract.
- c) **Successful bidder shall submit separate Security deposit / performance security for each contract with PIIC.**
- d) **Successful Bidder, subjected to meeting of all requirements under this tender document, shall be entrusted with work only after signing of agreement as per enclosed standard format with this tender document and payment of the security deposit / performance security as mentioned at point (b). Security deposit / performance security shall be forfeited in case the bidder fails to execute the order.**
- e) PIIC is entitled without being bound to adjust the whole or any portion of this Security deposit / performance security towards the recovery of any amount due from the successful bidder under this or any other contract with PIIC.
- f) PIIC is entitled to recover any loss / claim and / or damage arising out of the poor performance of the contract against the SD deposited of the successful bidder. Any loss / claims damages higher than SD amount will be recovered from payments to be made by PIIC to the successful bidder under this contract or deposits made by or payments due to the successful bidder under any other contract with PIIC.
- g) The security deposit / performance security (SD) will be refunded to the successful bidder after completion of this contract satisfactorily within 15 days from the date of written request from the bidder in this regard. The successful bidder must preserve cash receipt issued by PIIC towards security deposit / performance security. In the event of loss / misplacement of the cash receipt of the SD, the refund shall be made by PIIC only after furnishing of an Indemnity Bond by the successful bidder in the prescribed Performa, on non-judicial stamp paper of appropriate value duly notarized. The successful bidder shall bear all expenses towards execution of the indemnity bond.

Payment of bills

- a) No advance payment shall be made to the successful bidder by PIIC against this work order.
- b) After successful completion of all the works and handing over the entire system to PIIC, the vendor shall submit final bill.

- c) PIIC shall disburse payment for the actual work done / supply of materials / Job / services performed and certified by PIIC. Such payments will be made within 30 days of certified final bills submitted by vendor and the same is received at Accounts department of PIIC.
- d) Necessary deductions on account of GST credit / other taxes / duties as applicable and other deduction such as income tax etc., if any shall be deducted by PIIC from the contractor's Running bills.
- e) The Successful bidder shall authorize their representative to correct accounting documents of PIIC assets and / or products kept under his custody on behalf of PIIC and they will be liable for any discrepancy due to improper accounting of products therein.
- f) Notwithstanding anything contained contrary in this contract, the Successful bidder shall be entitled for receive payment against his final bills after adding/deducting amount arises considering any erroneous accounting done in the accounting documents handled by Successful bidder authorized representative.
- g) PIIC has introduced Electronic payment system for all vendors / contractors bills payment. All payments shall be through electronic mode (RTGS/NEFT) from PIIC Account. Therefore, the successful bidder shall furnish his bank account details to PIIC. Any change in the particulars shall be immediately informed to PIIC.
- h) The successful bidder shall furnish serially numbered and signed invoice / bill (in triplicate) containing W C T / Service Tax Registration Number /GST along with monthly bill for processing at PIIC. PIIC will be unable to process the Bill for payment unless the conditions prescribed under Service tax Rules as given above are complied with the successful bidder

Inspection/ Operation Contract

PIIC shall be entitled at all reasonable times to inspect the services / work or any part thereof under this contract. The Successful bidder shall provide all necessary assistance to PIIC in this regard. The successful bidder shall make all necessary corrections in quality of services / work under this contract to the satisfaction of PIIC.

Sub-Leasing/Operation of Contract

The successful bidder shall not be allowed to sublet or assign the benefits of the Purchase / Work order placed on them by PIIC to any other party without prior written consent and approval of PIIC.

Cancellation /Termination

PIIC's right to cancel the contract under the terms aforesaid shall be without prejudice to any of its other rights and remedies against the successful bidder. PIIC will be at liberty to fore close this contract / work order without assigning any reason, whatsoever, by giving an advance notice of 1 (One) month period.

PIIC will cancel / terminate the contract:

- a) If, the successful bidder is not able to perform the work within the time limits specified and in accordance with the contract. Under such situation, PIIC shall have the right either to cancel the whole or any part of the contract without being liable in any manner whatsoever to the successful bidder and without prejudice to any other rights of PIIC to get the work done from the alternate sources at the entire risk and cost of the successful bidder.
- b) If, the successful bidder shall commit a breach of any of the conditions stipulated in contract and fail to rectify such breach within a week of the receipt of the written notice from PIIC in this regard.
- c) If, it is found at a later date after award of contract that the Order has been secured by the successful bidder by providing false information or by concealing relevant information.
- d) If, the successful bidder fails to do, perform, render, execute, fulfill, keep, carry out, discharge or handle any, work, service, obligations, responsibilities and liabilities here under; PIIC shall, at its sole discretion, be entitled to terminate the contract awarded to the successful bidder / successful bidder hereunder at the latter's risk cost and consequences and without any prior notice or reference to it and without prejudice at any time likely before the expiry of the contractual period or any extended period thereof.
- e) If, the performance of the successful bidder is not satisfactory in PIIC's opinion, decision of PIIC shall be final and conclusive and shall not be open to challenge. Such termination shall be effective from the date specified in notice issued in writing to the successful bidder. In such an event, PIIC shall be entitled to make alternative arrangements for getting the work and services under the contract awarded to the Successful bidder and recover the additional cost from his bill or security deposit / performance security. The Successful bidder will be liable to compensate PIIC the losses/damages and costs which PIIC may have to suffer or bear as a result of its having to make such alternative arrangements.

- f) If, the successful bidder fails to comply with applicable statutory obligations during carrying out the services at PIIC.
- g) In the event of negligence /carelessness by the vendor resulting in any accident / loss of property or human life at PIIC during contract/agreement period.
- h) In the event of sustained poor performance by the vendor in terms of abnormally high loss of products beyond set target of PIIC.
- i) In the event of accidents due to negligence of the Vendor, when PIIC receives notices from statutory authorities in this respect.
- j) If the Vendor or its workmen are found involved in pilferage of products.
- k) If termination arises out of Governmental policy or directive or other reasons beyond the control of the company
- l) In the event of PIIC cancelling the contract, it shall not be liable to pay for any loss or compensation in respect of such cancellation. PIIC shall be at liberty to cancel the contract forthwith at any time.

Correctness of Document

It shall be understood that every endeavor has been made to avoid error which can materially affect the basis of this tender document. The successful bidder shall take upon himself and provide for risk of error(s), if any, which is discovered in this tender document at later date after awarding of contract and shall make no subsequent claim on account thereof. In other words, no advantage shall be taken by the successful bidder / successful bidder of any clerical error / mistake which may occur in the general specification, schedules, scope of work and other terms & conditions of this tender document.

Force Majeure Clause

If, at any item during the continuance of the contract the performance in whole or part by either party of any obligation under the contract shall be prevented or delayed by reasons of war, hostility acts of public enemy, civil commotion, sabotage. fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts or acts of God (hereinafter referred to as events) then provided notice of the happenings of any such events if given by either party or the other within twenty one days from the date of occurrence thereof, neither party shall by reasons of such event, be entitled to terminate the contract nor shall either party have any claim for damage against the other

whether in respect of such non-performance or delay in performance. Deliveries or acceptance of deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist and the decision of PIIC as to whether the deliveries or acceptance of deliveries have to be so resumed or not shall be final and conclusive provided further if the performance in whole or part or any obligation under the contract is prevented or delayed by reasons of any such event for period exceeding 60 days either party may at its option terminate the contract.

Best Price Clause

The orders placed on successful bidder shall be governed by the "Best price clause" under which, if, successful bidder / successful bidder offers a lower rate / better terms (other than at which order is placed on the items tendered by PIIC) to any other Pharma / Vaccine company /(PSUs) / other private parties during the pendency of the order, the same price / terms will automatically be applicable to PIIC with effect from the date of such lower rates offered by the successful bidder / successful bidder to such other parties.

Risk Purchase Clause

If, the successful bidder does not meet the indents placed by PIIC within the stipulated time, PIIC would be free to use services of any other successful bidder and recover the differential higher / additional cost to be paid to that successful bidder and any other cost incurred to PIIC for such services, from the successful bid

Manpower Deployed By the Successful Bidder

The successful bidder shall deploy adequate staff of the requisite competency that may be required for meeting the scope of services / work called for in this tender document. It is hereby specifically agreed that the responsibility for the employment of staff and their salary, wages remuneration, etc, shall be the sole responsibility of the successful bidder and that PIIC shall not be responsible in any manner directly or indirectly for such employment or expenses so incurred by the successful bidder. The successful bidder shall give a declaration to this effect. The successful bidder has to comply with all Labour related laws / rules in force w.r.t Minimum wages Act, Factories Act, Labour Act and all other such regulations / amendments made from time to time and in force and maintain all documents as required by Law enforcing Authorities and produce the same as and when called for.

Liquidated Damages for Delay in Execution of Contract

If the successful bidder commits any default or breach of terms & conditions of the Work Order placed on them or fail in delivering due performance thereof within the time fixed by PIIC (which is the essence of the contract) and does not complete the entire supplies / work on the stipulated due date, PIIC shall be entitled to recover from the successful bidder by way of liquidated damages an amount @ ½ % for full contract amount for every week of delay after work order issue subjected to maximum cumulative deduction of 5 % of the contract value.

Copy Right /Trade Mark of PIIC Related Discipline

The successful bidder shall not infringe, copy, imitate or otherwise deal with brand name, trade or merchandise marks or devices of design or copyright belonging to PIIC, entitled to use or otherwise alter, deface or interface with the same or pass off other goods or describe others goods as the same as that of PIIC or having been manufactured by PIIC or otherwise prejudice alter or affect the copyright, trade or merchandise marks or certified packing or design or colour of the company's labels or specification or the price or weight or other codification that is marked on the packing or caused to be given by PIIC, it is expressly agreed that all trademarks, design and copyright shall vest in PIIC, and nothing contained in this offer shall have the effect of creating any right, title or interest in respect of the successful bidder.

Business Secret/Marketing Discipline

It is hereby specifically agreed by successful bidder that this clause shall be deemed to be a condition going to the root of this offer, that the successful bidder shall not at any time during the subsistence of this contract or any time after its termination, call itself or hold out itself, advertise in any manner whatsoever by publication or otherwise, by printing, in writing or by any visual representation, either in its letter heads or news paper or magazines or leaflets, or by broadcasts over radio or by television or by any other media communication or in any manner whatsoever other than the appropriate Government Authorities to the extent necessary unless so permitted in writing by PIIC.

The successful bidder, hereby, agrees and undertakes not to disclose to any party whatsoever any formulate blend order, specifications, trade secrets, marketing projection or intelligence or any other data or information and shall keep absolute secrecy in all matters pertaining to this offer, all correspondence relating thereto, all instructions given or anything having any relevance with the offer on any matter touching or arising out of this arrangement including the Books, Accounts, papers and correspondence and shall keep strictest secrecy and confidence thereto to any person whomsoever other than appropriate Government Authorities to the extent necessary, unless directed to do so by PIIC in writing.

Warranty

The bidder shall give warranty of the equipment for a minimum period of 2 years (two years) from the date of final acceptance certificate from PIIC. PIIC shall grant right of access to the Contractor/ Bidder, of this portion of the work claimed to be defective for inspection and rectification. PIIC may recover the loss from the dues of the Contractor/ Bidder in case of failure to comply with the above clause.

Negotiation

The Parties shall first endeavour to settle amicably any Dispute, including without limitation, its existence, interpretation, performance, or termination, by negotiation. The Party raising the Dispute shall address to the other Party a notice requesting a negotiation of the Dispute within 15 (fifteen) days of such notification. Upon receipt of such notice, the Parties shall resolve such Dispute within 30 (thirty) days of receipt of the notice. Upon failure to resolve the Dispute in accordance with this clause, the Parties shall resolve the Dispute under Arbitration clause and Court of Law.

Arbitration Clause

Except, as otherwise provided elsewhere in the contract, if any dispute, difference, question, or disagreement arises between the parties hereto or their respective representatives or assignees, at any time, in connection with, meaning, operation, effect, interpretation or out of the contract or breach thereof, the same shall be referred to decided by an Arbitral Tribunal consisting of three arbitrators. Each party shall appoint one arbitrator and arbitrators so appointed shall appoint third arbitrator who will act as Presiding arbitrator. Subject as aforesaid the Indian Arbitration and Conciliation Act, 1996 shall apply to the arbitration proceedings under the Contract.

Jurisdiction

The successful bidder, hereby, agrees that the Courts situated in Coonoor / Nilgiris alone shall have the jurisdiction to hear and determine all actions and proceedings arising out of this contract. This agreement is subject to the special conditions stipulated in our schedule and issued Work Order and subsequent amendments, if any, notified from time to time.

Provision of Workmen's Compensation Act

In every case in which by virtue of the provisions of Section 12, Sub-Section(l) of the Workmen's compensation Act, 1923 or any other law for the time being in force. PIIC as principal is obliged to pay compensation to a workmen employed by the successful bidder, which in the first instance the responsibility of the successful bidder in execution of the work. PIIC will

recover from the successful bidder the amount of compensation so paid and without prejudice to the rights of PIIC under Section 12 Sub-Section (2) of the said Act, or any other law for the time being in force. PIIC shall be at liberty to recover such amount or any part there-of by deduction from the bill of the successful bidder or from his security deposit / performance security or from any sum due by PIIC to the successful bidder whether under this contract or otherwise. PIIC shall not be bound to contest any claim made against it under Section 12 Sub-section (1) of the said Act or any other law for the time being in force, except on the written request of the successful bidder and upon his giving to PIIC full security for all acts for which PIIC might become liable in consequence of contesting such claim.

PF, ESI, Registrations, Service Tax etc.

- a) The successful bidder shall get registered with the Provident Fund Commissioner and ESI the details of which shall be furnished to PIIC for record and the reference before commencement of the services / work. The successful bidder shall indicate his / their PF Code / ESI Number in the bills.
- b) Labor Law requirements such as Provident Fund Act, Minimum Wages Act, Workmen Compensation Act, Employee State Insurance Act or any such requirements as per rules of Central & State Govt., Competent Authority, in force from time to time shall be strictly complied with by the successful bidder PIIC reserves the right to inspect / verify documents maintained under aforesaid laws / regulation at regular intervals.

PIIC Lien on All Money Due

- a) PIIC shall have a paramount lien on overall money that may become due and payable to the successful bidder and / or also on the security deposit / performance security made under this contract which become repayable to the successful bidder or under any conditions contained herein this contract or sum that may become due and payable to the successful bidder by PIIC for operation execution or under any other contract or transaction of any nature whatsoever between PIIC and the successful bidder.
- b) Further, PIIC shall at all times be entitled to deduct the said debt or sum due from the successful bidder from the moneys, securities or deposit which may become payable to the successful bidder under these presents.
- c) The Successful bidder shall have no lien whatsoever on the product to be handled by him or any of the properties of PIIC for any payments due to them on account of this contract or any other work done by them for PIIC and shall not be entitled to claim any lien

whatsoever or cause any lien to be created to withhold the product or any other goods, things or assets belonging to or owned by PIIC and which are or may at any time hereafter come into their possession or control.

- d) The Successful bidder within 7 days of the execution of the contract, shall furnish an indemnity Bond incorporating that they will not have any lien whatsoever or will not cause any lien to be created to withhold product or any other goods or assets belonging to or owned by PIIC which are under their possession or control for purpose of settlement of their payments/ claims.

SECTION – III

SPECIAL CONDITION OF CONTRACT

Bidders are informed to visit PIIC to get familiarize with the facility for the execution of the prescribed job before submitting their quotation to PIIC.

The scope of work shall include the following:

- a) Supply, installation, testing and commissioning of clean room and non clean room IP CCTV, and Access control System at PIIC.
- b) Delivery of entire material to above locations including packing, handling, transporting, clearing, loading/unloading.
- c) Supply, installation, testing & commissioning of all the components/ instruments / accessories, etc. as per technical specifications, and handing over to the PIIC.
- d) Wherever the ground is dug for cable laying etc, it shall be restored to original condition. All debris etc. shall be disposed off to the nearest defined place by municipal authority or by PIIC representative as applicable.
- e) Providing all-inclusive service including all spares, etc. warranty and CAMC period.
- f) All engineering, instrument, labour, and permits required to satisfactorily complete the work required by this Specification.
- g) Any other work related to but not specifically mention above, required for completion of the job as per the intent and scope of work.

Penalty for delay in service during warranty and CAMC period

- a) During the warranty and CAMC period, all care shall be taken so that the downtime of the system is kept minimum and in any case, not more than the allowed time for attending to repairs. Any defects in any of the cameras shall be repaired **within 24 hours** from the time of reporting complaint in writing (complaints through phone, SMS, e-mails, fax etc. shall also be treated as complaints in writing). Any defects in any of the cameras, NVR, switches, routers etc., leading to complete breakdown of the system, shall be repaired within **12 working hours** from the time of reporting complaint. Any defects/ problems associated with the software shall be attended to immediately, **but not later than 12 hours from the time of the problem being noticed/** reported. If the down time exceeds the

above mentioned period, penal recovery shall be made from the payments due to the contractor at the following rates:

1-7 days excluding date of lodging of complaint: Rs. 100/= per day/per unit

8th day to 30 days: Rs. 250/= per day/per unit

More than 30 days: Rs. 350/= per day/per unit

Non-functional server / software leading to system failure - @ Rs 2000/- per day/per unit

- b) Penalty of 1% of the cost of total tender value will be charged every quarter if, the Preventive Maintenance is not done by tenderer. Penalty for Preventive Maintenance not done will not be charged for the quarter in which the machine has been delivered/installed.
- c) However extension of warranty/replacement of instrument will not be applicable if the breakdown is due to reasons not attributable to the tenderer. However, the onus of proving the same would be on the tenderer. If the system's defect is attributable to mishandling, negligence or operation by unauthorized staff, the tenderer will not be liable to repair the same under the contract. The tenderer under such circumstances shall charge extra for spare & service rendered.
- d) The penalty amount will be recovered from the Security Deposit lying with the PIIC. Complaint(s) will be deemed to be resolved only on the availability of the Customer Call Report (CCR) signed by both the service engineer and PIIC's authorized official, confirming that the complaint is resolved. Date and time of resolution of the complaint shall be indicated clearly.

Other Conditions:

- a) The contractor must bear in mind that all the work shall be carried out strictly in accordance with the specifications made by the PIIC and also in compliance of the requirement of the local public authorities and any other Acts/Rules/Regulations and no deviation on any account will be permitted.
- b) The Contractor shall carry out all the work strictly in accordance with details, and instructions of the PIIC's engineer. If in the opinion of the PIIC's engineer, nominal changes have to be made to suit the site condition and with the prior approval in writing of the PIIC, they desire the Contractor to carry out the same, the Contractor shall carry out the same without any extra charge.

- c) The tenderer must obtain for himself on his own responsibility and at his own expense, all the information which may be necessary for the purpose of making a tender and for entering into a contract and must examine the drawings, inspect the site of the work, and acquaint himself with all local conditions, means of access to the work, nature of the work and all matters pertaining thereto. The PIIC's decision in such cases shall be final and shall not be open to arbitration.
- d) A Schedule of Probable Quantities in respect of each work and Specifications accompany these Special Conditions. The Schedule of Probable Quantities is liable to alteration by omissions, deductions or additions at the discretion of the PIIC.
- e) The contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the cause of delays may be, including delays arising out of modifications to the work entrusted to him or in any sub-contract connected therewith or delays in awarding contracts for other trades of the project or in commencement or completion of such works. The PIIC does not accept liability for any sum besides the tender amount, subject to such variations as are provided for herein.
- f) The successful tenderer is bound to carry out all items of work necessary for completion of the job even though such items are not included in the quantities and rates. Schedule of instruction in respect of such additional items and their quantities will be issued in writing by the PIIC.

Testing & Commissioning Checklist filled by Vendor:

| S.No | Description | Visual | Test Readings | Documentation |
|------|---|--------|---------------|---------------|
| 1 | All cables are tested for continuity, insulation, resistance, etc. | √ | √ | √ |
| 2 | System installation proper as per drawing | √ | NA | √ |
| 3 | Carry out visual checks on all cameras, cables, camera housing etc to ensure they are clean and free from any mechanical damage | √ | √ | √ |
| 4 | Check for proper termination & feruling | √ | NA | √ |
| 5 | Check input A/C supply voltage | NA | √ | √ |
| 6 | Check Input supply DC voltage at every camera | NA | √ | √ |
| 7 | Check proper connection of video cable to ensure that there is no video loss | √ | √ | √ |
| 8 | Check all cameras signal on monitor. Also check for clarity , sharpness of the picture | √ | √ | √ |
| 10 | Check recording, playback & other various features randomly | √ | √ | √ |
| 11 | Check recording frame rate | √ | √ | √ |
| 12 | Check all software server & client has been installed correctly & running without any bug/error | √ | √ | √ |

Documentation:

The CCTV system contractor, upon completion of all the activities, shall offer the system to the customer for acceptance. For this, the contractor shall provide the customer with the following documentation:

1. Copy of detailed report
2. Component and instrument list with detailed specification
3. Product description sheets and manuals

4. System design drawing(s)
6. System schematic diagram(s)
7. System operating manual
8. Certificate relating to compliance (e.g Material of Construction etc..)
9. Original licensed copies of all the software (OS, DVMS, Video analytics, Antivirus, etc.)

Final acceptance and Handover-takeover:

Prior to final acceptance, the contractor shall provide complete operation and maintenance instruction manuals to the PIIC along with all the above mentioned documents. All aspects of system operation and maintenance shall be detailed, including wiring diagrams of all circuits, a written description of the system design, sequence of operation and drawing(s), illustrating control logic and instrument used in the system. Checklists and procedures for emergency situations, maintenance operations and procedures shall be included in the manual.

The PIIC Eengineering team, Quality Assurance and security officer then shall test and inspect the functioning of various components (e.g. cameras and their functions, recording features, etc.) and a joint report shall be prepared. In case of any observations from PIIC's side, the same shall be conveyed to the contractor in writing and got attended to by the contractor to the satisfaction of the inspecting officials. The entire system then shall be taken over by PIIC and the defect liability period shall start from the handing over of the entire systems (instruments/components).

PIIC reserves the right to inspect equipments and cables, other instrument, etc. Any inspected goods fail for confirm to specification after installation, PIIC may reject them and the Vendor shall have to replace the rejected goods. In case of inspection waiver the same shall be obtained before the Sample approval should be obtained before installation for such material.

APPENDIX – A

Technical Specification

1) 5.0MP, Full HD Day/Night IP based bullet type outdoor camera

| S.No | General Specification | Technical Specification |
|------|------------------------------|--|
| 1. | Sensor | progressive scan, 5.0 megapixel, CMOS |
| 2. | Lens | 3.6 – 12mm Varifocal, AF automatic focusing and motorized zoom lens |
| 3. | Video Streams | 4 Streams |
| 4. | Shutter | Auto/Manual, shutter time: 1/30~1/10,000 s |
| 5. | Minimum Illumination | Color: 0.1 Lux (F1.2), B/W: 0 Lux with IR on |
| 6. | Day/Night | IR-cut filter with auto switch (ICR) |
| 7. | Digital noise reduction | 2D/3D DNR |
| 8. | S/N | >45 dB |
| 9. | IR Range | Up to 40m IR range |
| 10. | Defog | Yes |
| 11. | WDR | 120dB |
| 12. | Video Compression | H.265 or better |
| 13. | Frame rate | 25/30 fps or better |
| 14. | HSBLC | Supported |
| 15. | BLC | Supported |
| 16. | OSD | Supported |
| 17. | Privacy Mask | Up to 8 areas |
| 18. | Motion Detection | Yes |
| 19. | Audio Compression | G.711, G.726 |
| 20. | Two-way audio | Supported |
| 21. | Recording Session Buffer | Yes (minimum 50MB) |
| 22. | Edge Storage (Micro SD Card) | Should support up to 128 GB, (to be supplied with 64GB). |
| 23. | Security | SSL Encryption, Multi-user Authority, IEEE 802.1x IP Filtering, HTTPS, |

| | | |
|-----|------------------------|---|
| 24. | Trigger Events | Motion Detection, Tampering, Trip Zones |
| 25. | Protocols | IPv4, TCP, UDP, DHCP, RTP, RTSP, DNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP |
| 26 | Compatible Integration | ONVIF (Profile S), |
| 27 | Audio I/O | 1/1 |
| 28 | Alarm I/O | 1-Ch in/1-ch out |
| 29 | Network | 1 RJ45 10M/100M Base-TX Ethernet |
| 31 | Power | 12 V DC±25%, PoE (IEEE802.3 af) |
| 32 | Working Environment | Temperature: -10°C ~ +50°C Humidity: 0%~ 90% RH (non-condensing) |
| 33 | Vandal Proofing | IK10 |
| 34 | Ingress Protection | IP66 |
| 35 | Certification | CE, FCC, UL, BIS, KC |

2) 8.0MP Full HD Day/Night bullet type outdoor camera

| S.No | General Specification | Technical Specification |
|------|-------------------------|---|
| 1 | Sensor | progressive scan, 8.0 megapixel, CMOS |
| 2 | Lens | 3.6 -12 mm varifocal, AF automatic focusing and motorized zoom lens |
| 3 | Video Streams | 4 Streams |
| 4 | Shutter | Auto/Manual, shutter time: 1/30~1/10,000 s |
| 5 | Minimum Illumination | Color: 0.1 Lux (F1.2), B/W: 0 Lux with IR on |
| 6 | Day/Night | IR-cut filter with auto switch (ICR) |
| 7 | Digital noise reduction | 2D/3D DNR |
| 8 | S/N | >45 dB |
| 9 | IR Range | Up to 40m IR range |
| 10 | Defog | Yes |
| 11 | WDR | 120dB |
| 12 | Video Compression | H.265 or better |
| 13 | HSBLC | Supported |
| 14 | BLC | Supported |
| 15 | OSD | Supported |
| 16 | Privacy Mask | Up to 8 areas |
| 17 | Motion Detection | Yes |

| | | |
|----|------------------------------|---|
| 18 | Audio Compression | G.711, G.726 |
| 19 | Two-way audio | Supported |
| 20 | Recording Session Buffer | Yes (minimum 50MB) |
| 21 | Edge Storage (Micro SD Card) | Should support up to 256 GB, (to be supplied with 64GB). |
| 22 | Security | SSL Encryption, Multi-user Authority, IEEE 802.1x IP Filtering, HTTPS, |
| 23 | Trigger Events | Network disconnection, illegal access, IP conflict, Motion Detection, Tampering, Trip Zones |
| 24 | Protocols | IPv4, TCP, UDP, DHCP, RTP, RTSP, DNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP |
| 25 | Compatible Integration | ONVIF (Profile S), |
| 26 | Audio I/O | 1/1 |
| 27 | Alarm I/O | 1-Ch in/1-ch out |
| 28 | Network | 1 RJ45 10M/100M Base-TX Ethernet |
| 29 | Power | 12 V DC±25%, PoE (IEEE802.3 af) |
| 30 | Working Environment | Temperature: -10°C ~ +50°C Humidity: 0%~ 90% RH (non-condensing) |
| 31 | Vandal Proofing | IK10 |
| 32 | Ingress Protection | IP66 |
| 33 | Certification | CE, FCC, UL, BIS, KC |

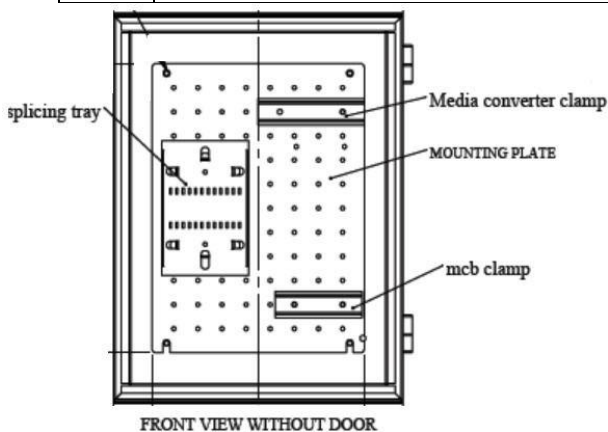
3) 5.0MP Full HD Dome type Indoor Camera

| S.No | General Specification | Technical Specification |
|------|-------------------------|---|
| 1 | Sensor | progressive scan, 5.0 megapixel, CMOS |
| 2 | Lens | 4 mm, AF automatic focusing and motorized zoom lens |
| 3 | Video Streams | 4 Streams |
| 4 | Shutter | Auto/Manual, shutter time: 1/30~1/10,000 s |
| 5 | Minimum Illumination | Color: 0.1 Lux (F1.2), B/W: 0 Lux with IR on |
| 6 | Day/Night | IR-cut filter with auto switch (ICR) |
| 7 | Digital noise reduction | 2D/3D DNR |
| 8 | S/N | >45 dB |
| 9 | IR Range | Up to 30m IR range |

| | | |
|----|------------------------------|---|
| 10 | Defog | Yes |
| 11 | WDR | 120dB |
| 12 | Video Compression | H.265 or better |
| 14 | HSBLC | Supported |
| 15 | BLC | Supported |
| 16 | OSD | Supported |
| 17 | Privacy Mask | Up to 8 areas |
| 18 | Motion Detection | Yes |
| 19 | Audio Compression | G.711, G.726 |
| 20 | Two-way audio | Supported |
| 21 | Recording Session Buffer | Yes (minimum 50MB) |
| 22 | Edge Storage (Micro SD Card) | Should support up to 256 GB, (to be supplied with 64GB). |
| 23 | Security | SSL Encryption, Multi-user Authority, IEEE 802.1x IP Filtering, HTTPS, |
| 24 | Trigger Events | Network disconnection, illegal access, IP conflict, Motion Detection, Tampering, Trip Zones |
| 25 | Protocols | IPv4, TCP, UDP, DHCP, RTP, RTSP, DNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP |
| 26 | Compatible Integration | ONVIF (Profile S), |
| 27 | Audio I/O | 1/1 |
| 28 | Alarm I/O | 1-Ch in/1-ch out |
| 29 | Network | 1 RJ45 10M/100M Base-TX Ethernet |
| 30 | Power | 12 V DC±25%, PoE (IEEE802.3 af) |
| 31 | Working Environment | Temperature: -10°C ~ +50°C Humidity: 0%~ 90% RH (non-condensing) |
| 32 | Vandal Proofing | IK10 |
| 33 | Ingress Protection | IP66 |
| 34 | Certification | CE, FCC, UL, BIS, KC |

4) IP rated (weather proof) outdoor Box

| S.No | General Specification |
|------|--|
| 1 | Frame Enclosures in sturdy sheet steel construction consisting of a 1.5mm sheet steel frame folded from one piece and welded, with All-round protective channel on the door aperture. Cutout with Gland plates on Top sides for cable entry purpose. |
| 2 | Doors 2mm sheet steel door with foamed-in seal, screw fixed hinges Which can be changed for left-hand or right-hand door hanging (for Single door enclosures), 130° opening angle which can be retrofitted for 180° , cam lock with double-bit insert. |
| 3 | Enclosure Material CRCA Sheet steel |
| 4 | Surface finish Powder-coated |
| 5 | Color Nano Ceramic Coated, electro-dip coat primed to 20 microns and powder coated with Textured polyester RAL 7035 to 80 to 120 microns |
| 6 | Dimension (minimum) 300 X 400 X 210 (mm) |
| 7 | IP Protection IP66 |
| 8 | Paint Electrophoretic Powder quoting: |
| 9 | Standard and Certificates Regulatory Standard Compliance: IP66 to EN60529 , ISO 9001, 14001, comply with EIA 310 ,DIN 41494 |
| 10 | Supply includes:6 Core Fiber Splice Tray, Pole 16Amp MCB Terminal Blocks |



5) Network Video Recorder 64 channel.

| S.No | General Specification | Technical Specification |
|------|--|---|
| 1 | Channels | 32-ch IP Channel |
| 2 | Max incoming | 640 Mbps or better |
| 3 | Supported Camera | Onvif |
| 4 | Video Output | 2 HDMI/1 VGA |
| 5 | Display Resolution | 3840x2160, 1920x1200, 1920x1080, 1680x1050, 1600x1200 |
| 6 | Display Speed | Up to 1920 ips |
| 7 | Digital Zoon | X2 ~ X12 |
| 8 | Max Throughput | 4K (UHD) resolution with 30 frames per second (maximum) |
| 9 | Recording Resolution | Up to 12MP (depending on IP camera) |
| 10 | Encoding Mode | CBR, VBR |
| 11 | Compression | H.265, |
| 12 | Recording Mode | Time-Lapse, Event, Pre-Event, Panic Alarm-in, Audio Detection, Trip Zone, Tampering |
| 13 | Trigger Events with suitable analytics | Video Loss, Text-in, Network fail, power fail, etc. |
| 14 | Performance | 16 Channels Full HD Synchronous Playback time-lapse, event log, Thumbnail |
| 15 | Search Mode | Motion, Text-in |
| 17 | HDD | SAT x4, e-SATA x1 (as per project requirement, support up to 8TB capacity for each disk), RAID 1, 5/6, 10 supported |
| 18 | Total Capacity | External HDD Capacity: 4x4 capacity |
| 19 | Client Connection | Gigabit Ethernet (Client) x1 |
| 20 | Video In Connection | Gigabit Ethernet (Video-in) x3 |
| 21 | Remote Data Export | Yes, e-Mail (attach clip) |
| 22 | Event Notification | Notification (Mobile) |
| 23 | Redundancy Support | 10:01 |
| 24 | Two Way Audio | Yes, Local NVR: 1RCA/1RCA+1HDMI |
| 25 | Audio In/Out | IP Camera: 64/64 (depending on IP Camera) |
| 26 | Alarm In/Out | Local (NVR): 4/1, IP Camera: 64/64 |

| | | |
|-----|---------------------|--|
| 27 | Alarm Reset In | 1 |
| 29 | Serial Interface | RS-232 (Terminal Blocks), RS-485 |
| 30 | USB | USB 2.0X2, USB 3.01X1, Mouse Control, Keyboard |
| 31 | User Interface | Button (Panic) |
| 32 | Operating System | Embedded Linux / Windows |
| 33 | Chassis | Rack Type |
| 34 | Working Temperature | 0 ~ 40 degree C |
| 35 | Operating Humidity | 10 ~ 90% |
| 36 | Ethernet | 1 x RJ-45 port (10/100/1000 Mbps) |
| 37. | Certification | CE, FCC, UL, BIS, KC |

6) Backup:

The Bidder is to submit the Storage Calculations for **60 days** with the offer value for nos of IP CCTV and of biometric access control system.

7) Servers

Minimum Configuration for Server

- a) 16 Core, 3.5 GHz, 16GB RAM or higher
- b) Raid-5 Controller Dual/Redundant Power Supply
- c) Windows / Linux Server Operating System
- d) Rack Mount Chassis (Some specifications will be taken as per application/type of server)
- e) **The server shall be used for store the datas of entire cctv and access control system for 60 days backup.**

8) Command & Control Software with other modules functionality

The Command & Control Software Should be able to integrate to NVR, AI Analytics, ANPR, This should be depicted on the map with highlighting the zone of intrusion. The Command & Control Software should be integrated to Google Maps to support position of cameras. The Command & Control software should have an integrated AI based Video Analytics to support following features:

- a) Object Detection (differentiation between Humans & Vehicles)
- b) Tripwire
- c) Person moving in/out of an area

- d) Intrusion Detection
- e) Search based on Color
- f) Count no of people in an area
- g) Combination Search between Person & Vehicle

The VMS Software, Video Analytics, ANPR should be a seamless integrated single software Platform with state of health in respect of cameras and UPS. ANPR may be supplied as a separate system but should have ability to work on non-standard and non-reflective number plates also based condition of the number plate.

The minimum configuration for Video Management and related functions are as follows:

| S.NO | General Specification |
|------|---|
| 1. | Video Management Software: |
| 2. | This shall be a highly scalable enterprise level software solution. It shall offer a complete video surveillance solution that will be scalable to required numbers of cameras that can be added on a unit-by-unit basis. |
| 3. | The Management Software shall be licensed and shall operate on open architecture and shall require no proprietary IT hardware. |
| 4. | The Management Software shall allow for video to be streamed on workstation in Matrix or on a video wall. |
| 5. | The user with administrative rights shall create clients (users) and give access to the software client application based on predefined user access rights. |
| 6. | The system shall allow the recording, live monitoring, playback of archived video and data simultaneously. |
| 7. | The software shall provide the following: |
| 8. | Several simultaneous live picture connections of camera in network. |
| 9. | Configuration of monitoring situation (site maps). |
| 10. | Programming of alarm-triggered automatic events in various alarms configuration. |
| 11. | System set-up for pre-defined surveillance tasks/video analytics feature. |
| 12. | Programming of automatic recording events on a network recorder. |
| 13. | The software shall display dual H.264 & H.265 video streams in real time simultaneously at frame rates ranging from 1 fps to 25 fps and resolution ranging |

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| | Full HD to other HD/SD resolution. |
| 14. | Each camera's bit rate, frame rate and resolution shall be set independently from other cameras in the system, and altering these settings shall not affect the recording and display settings of other cameras. |
| 15. | The software shall provide automatic search and discovery of components of video surveillance system on the network which can be network cameras. |
| 16. | The software shall provide drag & drop functions on the system and also for set up of connection between cameras and monitors connected to one workstation. |
| 17. | The software shall allow: Live display of cameras. |
| 18. | Live display of camera sequences. |
| 19. | Control of PTZ cameras. |
| 20. | Playback of archived video. |
| 21. | Retrieval of archived video. |
| 22. | Instant Replay of live video. |
| 23. | Use of site maps. |
| 24. | Configuration of system settings. |
| 25. | Configuration and programming of P/T/Z cameras, features like auto tours, presets etc. |
| 26. | The software shall be able to do video recording on any of the following options - inbuilt hard disks on the server, direct attached storage boxes attached to servers, network attached storage, storage area network. |
| 27. | The software shall be capable of handling camera and alarm icons on area maps. The area map/camera shall be configurable to pop up upon the receipt of an alarm received from a camera on the map. This can be on the same or other monitors on the PC. |
| 28. | The software shall be able to select the required recording based on the time recording was activated, the duration of recording, operator activated recording, event activated recording, scheduled recording. |
| 29. | The software shall provide a reporting utility for tracking for the following minimum options. Video clips and image snapshots shall be stored with reports for |

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| | documenting events. |
| 30. | Alarms, Incidents and Operator logs shall be stored |
| 31. | The software shall have the facility to export the desired portion of clipping of video from a desired date/time to another desired date/time on DVD/ on any client/ network storage device. Viewing of this recording shall be possible on authorized player which shall be provided by software manufacturer or in media player on computer utilizing a Window environment. |
| 32. | The Video Management servers shall not limit the number of network video recording servers which can be networked together to form video management and recording system. |
| 33. | The Video Management servers shall maintain a catalog of settings for all the clients, servers, and IP cameras & IP enabled cameras in the system. If Video Management servers & recording cannot be managed by single server, in such cases, additional server shall be provided. |
| 34. | The software shall enable the client to dynamically create connections between cameras and clients and view live or recorded video on Monitors. |
| 35. | The software shall provide the client seamless operation of all cameras and clients available in the system regardless of the actual connection to different Network Video Recording servers. |
| 36. | The software shall detect signal loss and have the capability to alert the systems administrator. |
| 37. | The software shall receive all incoming events (motion detection and triggered digital input and relay output) in the system and take appropriate actions based on user-defined event/action relationships. |
| 38. | The software shall create an audit trail of all events and user activities. |
| 39. | The Management Software shall support the following:- |
| 40. | The Management Software shall provide a full matrix operation of IP video and audio to display monitors. |
| 41. | The Management Software shall have the capability of creating camera sequences with the following functionalities: |
| 42. | Each Sequence shall have capability up to hundreds of cameras. |
| 43. | Each camera in the sequence shall have its own individual dwell time, from 1 to |

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| | 60seconds. |
| 44. | Multiple users shall be able to view the same camera sequence simultaneously, not necessarily synchronized one with the other. |
| 45. | The software shall provide alarm management module. |
| 46. | The alarm management shall be able to set any monitor or groups of monitors to automatically display cameras in response to alarm inputs. |
| 47. | The alarm management shall be able to reset automatically or manually alarmed video. |
| 48. | It shall be possible to search for recordings in the software by camera, date and time. If a data and time is specified, playback shall commence from that date and time. It shall be possible to playback more than one camera simultaneously. |
| 49. | The software shall support up to 256 video streams concurrently. It shall support at least 6 monitors in one server/ workstation for displaying live video.. It shall allow minimum 16 cameras to be replayed simultaneously. |
| 50. | The VMS shall be seamlessly integrated with Face recognition Software and have capability to receive the alerts. |
| 51. | Graphic User Interface Client Software Features: |
| 52. | The GUI software shall perform the following applications simultaneously:- |
| 53. | Live display of cameras. |
| 54. | Live display of camera sequences. |
| 55. | Control of movable camera cameras. |
| 56. | Playback of archived video. |
| 57. | Retrieval of archived video. |
| 58. | Instant replay of live video. |
| 59. | Use of graphical controls (maps) and alarm management. |
| 60. | Configuration of system settings. |
| 61. | The GUI software shall support any form of IP network connectivity including LAN, WAN and wireless LAN technologies. |
| 62. | The GUI software shall support multicast and unicast video streaming. |
| 63. | The GUI software shall provide an authentication mechanism, which verifies the validity of the user. |

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| 64. | The GUI software shall allow for live monitoring of video. |
| 65. | It shall enable view of 1 to minimum 64 video tiles simultaneously on a single digital monitor at 25 fps per camera. |
| 66. | The software shall provide on each of the digital monitors independently the following tile views: |
| 67. | Full screen |
| 68. | Quad view |
| 69. | 4x4 (32-view) |
| 70. | The Software shall also support any other window division based on the site requirement. |
| 71. | The GUI software shall allow operators to view an instant replay of any Camera. |
| 72. | The operator shall be able to define the amount of time he wishes to go back from a timeline bar or through a custom setup period. |
| 73. | The operator shall be able to control the playback with play, pause, forward, and speed buttons. |
| 74. | The operator shall be able to choose and trigger following minimum action from a site map: |
| 75. | View Camera in a video tile. |
| 76. | View map in map. |
| 77. | The GUI software shall provide management and control over the system using a standard PC mouse, keyboard and Digital keyboard. |
| 78. | The GUI software shall display all cameras attached to the system regardless of their physical location on the network. |
| 79. | The GUI software shall display all camera sequences created in the system. |
| 80. | The GUI software shall allow operators to control (pause/play, skip forwards, skip backwards) camera sequences. |
| 81. | The GUI software shall display all cameras, sequences and users in a logical tree. |
| 82. | The GUI software operator shall be able to drag and drop a camera from a tree of available cameras into any video tile for live viewing. |
| 83. | The GUI software operator shall be able to view the camera from a tree of available cameras into any video tile for live viewing. |

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| 84. | The GUI software shall support graphical site representation (map) functionality, where digital maps are used to represent the physical location of cameras and other devices throughout facility. |
| 85. | The maps shall have the ability to connect video clip through a hyperlink. |
| 86. | The GUI software operator shall be able to view the camera from a map into a video tile for live viewing in the same interface without opening a new. |
| 87. | The GUI software shall support digital zoom on a fixed camera's live video streams. |
| 88. | The GUI software shall support digital zoom on a movable camera camera's live video streams. |
| 89. | The operator shall be able to control Pan, Tilt and Zoom patterns of P/T/Z Camera. |
| 90. | The software shall be able to display video of cameras on Large Format Display Monitors and Workstation Monitors. |
| 91. | The software shall allow the control of display from the client PC. |
| 92. | The operator from the GUI software shall be able to decide the screen layout and also the cameras that shall be displayed on the monitors. |
| 93. | The software shall support multicasting and swapping of screens for set time |
| 94. | It shall be possible to switch the screen layout in response to an alarm. |
| 95. | The GUI Software shall support text superimposing the title and date & time. |
| 96. | Video Recording Software: |
| 97. | Software shall support recording of H.264/H.265 video streams. It shall support recording of video and audio for all the channels. |
| 98. | Software shall support triplex applications, recording, re-play and backup simultaneously. It shall be compatible with windows Server OS or Linux for highest performance and reliability. |
| 99. | Software shall operate on open architecture and shall not require any proprietary hardware. |
| 100. | Software shall be able to record minimum 64 different video streams or more simultaneously. It shall be accessible from any client PC connected to the network. |
| 101. | Software shall provide network time server function to ensure the synchronization of the video servers and the recordings. |

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| 102. | The servers shall be connected to the network so that these can be placed at any location which has network access. |
| 103. | The software shall be able to receive alarms of different types from equipment to start a recording. These alarms can be motion detection, video loss, and trigger input. |
| 104. | The software alarm recording shall support pre-and post-alarm periods. Both can be configured in duration and Fault Tolerant Recording: |
| 105. | The software shall provide a status of the available recording capacity. |
| 106. | If software & server(s) operation are interrupted, like power disconnection and once the server(s) are restarted, these shall automatically resume recording of any cameras these were recording prior to the interruption. |
| 107. | The software shall support network fault-tolerant recording such that if the network connection between a video management server and video recording server becomes unavailable, for example through cable breakage, network congestion or WLAN interruption, the system operation shall automatically Recover when the connection is restored. |
| 108. | Search & Export: |
| 109. | It shall be possible to search for recordings in the software by camera, date and time. If a data and time is specified, playback shall commence from that date and time. It shall be possible to playback more than one camera simultaneously. |
| 110. | The software shall be able to export sections of recordings to a separate Windows folder, which can then be written to CD-ROM, DVD-ROM or USB Flash Drives etc. to be played back at a location not connected to the network video management & recording network. The export process shall make available a player application, which can be provided with the exported video. Export shall be possible in Windows media player or any other media player compatible format. Simultaneous export of multiple cameras shall also be possible. |
| 111. | Shall provide live video view, various video playback support, historical video search and playback, alarm management, Map integration and front end control features to an operator. Client Application shall also able to manage & control all devices depending on the user access privileges. System should support virtually unlimited VMS Clients and the licenses for the same shall be included in the VMS |

9) PC work station

| S.No | General Specifications |
|-------------|--|
| 1. | Core i7 processor. 8GB RAM Gen 7th ,i7-7700 |
| 2. | 8 GB RAM and 1TB ROM, Win10 pro, 2X USB 3.1 Port & 2 X USB2.0 Port, Antivirus loaded ,HDMI,VGA and 2 No's of Ethernet Port |
| 3 | 21" Led monitor , Key board, optical Mouse and all accessories |

10) Full HD Bullet Day/Night camera for Automatic Number Plate Recognition (ANPR)

| S.No | General Specification | Technical Specification |
|-------------|------------------------------|--|
| 1 | Sensor | progressive scan, 8.0 megapixel, CMOS |
| 2 | Lens | 3.6-12 mm varifocal, AF automatic focusing and motorized zoom lens |
| 3 | Video Streams | 4 Streams |
| 4 | Shutter | Auto/Manual, shutter time: 1/30~1/10,000 s |
| 5 | Minimum Illumination | Color: 0.1 Lux (F1.2), B/W: 0 Lux with IR on |
| 6 | Day/Night | IR-cut filter with auto switch (ICR) |
| 7 | Digital noise reduction | 2D/3D DNR |
| 8 | S/N | >45 dB |
| 9 | IR Range | Up to 40m IR range |
| 10 | Defog | Yes |
| 11 | WDR | 120dB |
| 12 | Video Compression | H.265 or better |
| 13 | HSBLC | Supported |
| 14 | BLC | Supported |
| 15 | OSD | Supported |
| 16 | Privacy Mask | Up to 8 areas |
| 17 | Motion Detection | Yes |
| 18 | Audio Compression | G.711, G.726 |
| 19 | Two-way audio | Supported |
| 20 | Recording Session Buffer | Yes (minimum 50MB) |
| 21 | Edge Storage (Micro SD Card) | Should support up to 256 GB, (to be supplied with 64GB). |

| | | |
|----|------------------------|---|
| 22 | Security | SSL Encryption, Multi-user Authority, IEEE 802.1x IP Filtering, HTTPS, |
| 23 | Trigger Events | Network disconnection, illegal access, IP conflict, Motion Detection, Tampering, Trip Zones |
| 24 | Protocols | IPv4, TCP, UDP, DHCP, RTP, RTSP, DNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP |
| 25 | Compatible Integration | ONVIF (Profile S), |
| 26 | Audio I/O | 1/1 |
| 27 | Alarm I/O | 1-Ch in/1-ch out |
| 28 | Network | 1 RJ45 10M/100M Base-TX Ethernet |
| 29 | Power | 12 V DC±25%, PoE (IEEE802.3 af) |
| 30 | Working Environment | Temperature: -10°C ~ +50°C ,Humidity: 0%~ 90% RH |
| 31 | Vandal Proofing | IK10 |
| 32 | Ingress Protection | IP66 |
| 33 | Certification | CE, FCC, UL, BIS , KC |

10.1) Automatic Number Plate Recognition (ANPR) Systems

| S.No | General Specifications |
|------|--|
| 1. | The ANPR module shall include the following, but is not limited to: |
| 2. | The Service provider shall install ANPR Cameras at entry/exit points to capture vehicles coming and going out. This system shall automatically capture and recognize the number license plate of the vehicle |
| 3. | The system should be integrated for detection, analysis, storage & retrieval of the numberPlate information with Command & Control Center. |
| 4. | The system should be able to provide alerts for hot listed vehicles when in range of detection. |
| 5. | Shall support accuracy of vehicle capture over 95%, the license plate recognition rate is over 80% in day and 60% at night, at 100Kmph speeds based on OCR conversion from image. |
| 6. | Traffic Data Counting Performance: Up to 2 lanes for traffic data counting Vehicle type |
| 7. | The system should be able to provide search features based on time, date, location, camera number and any digit / alphabet of the number plate. |

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| 8. | The system shall generate alarms for vehicles identified under hot listed category by user. |
| 9. | The system shall allow user to view multiple views simultaneously for different locations. |
| 10. | The system should be able to raise alarm on detection of wrong directional movement of vehicle |

11) Monitor 50 Inch.

Large Format Display Monitors shall be used for displaying multiple Cameras Video in conjunction with viewing workstation. These monitors shall be suitable for 24 (round the clock) use. One such Monitor shall display minimum 32 Cameras on a single unit. Selection of these Cameras shall be as per software specifications. Large Format Display Monitors shall be LED back lit type and shall have the following minimum specifications:

| S. No | Parameter | Specification |
|-------|--------------------------------------|--|
| 1. | Screen Size | 50" (inches) or larger |
| 2. | Video Resolution | Full HD (1920x1080) or better |
| 3. | Brightness | 350cd/m ² or above |
| 4. | Contrast Ratio | 1100:1 |
| 5. | Viewing angle (H/V) | 170° |
| 6. | Response Time | ≤12 ms |
| 7. | Digital input | HDMI |
| 8. | Analog Input | RGB/VGA/BNC |
| 9. | USB Port | 01 no. |
| 10. | External Control | RJ45 |
| 11. | Display Control | Monitor control on screen display, Programmable with remote. |
| 12. | Regulatory Approvals/ Certifications | UL/EN/CE/IEC/BIS certification for Safety/ FCC for EMC. |

12) Power over Ethernet (PoE) switch

| S.No | General Specifications |
|------|---|
| 1. | 16/24 ports 10/100/1000Mbps Web Managed & Cloud managed Switch with 4 Gigabit Combo RJ-45/SFP Ports |
| 2. | Switching Capability:56Gbps |
| 3. | MAC Address Table:16K |
| 4. | L2 Features Auto-negotiation for port speed and duplex mode Spanning Tree Protocol - Support STP/RSTP – Loop back Detection IGMP v1/v2/v3 Snooping: IGMP Querier IGMP Proxy VLANs - 256 IEEE 802.1q tag based VLAN with 4K lan ID - Port Isolation (Multi-to-one) Link Aggregation |
| 5. | Quos Features, Queuing Mechanism: SP and WRR,WFQ, Classifications based on - COS -IP DSCP, Each port supports 8queues LLDP |
| 6. | Security, Mac address Binding, Support Broadcast storm control IP and MACACL |
| 7. | Management, Port Mirroring, Support traffic statistics, Provide IPv4/v6 Web-based management, Configuration Backup and Recovery |
| 8. | Standards IEEE 802.310BASE-T, IEEE 802.3u100BASE-TX , IEEE 802.3ab1000BASE-T, IEEE 802.3z, ANSI/IEEE 802.3Nway , IEEE 802.3x |
| 9. | Environmental Specifications Temperature : 0°C~50°C (Standard Operating) 40°C to 70°C (Non- Operating) Humidity: 10% to 90%(Non-condensing) |

13) 12 Core Optic Fiber Cable Armored

| S. No. | General Specifications |
|--------|--|
| 1. | 12 core OS2 double sheath Optical Fiber Cable |
| 2. | Cable containing 24 fibers in water blocked tubes, with corrugated steel taped armoring. |
| 3. | Jelly filled with Multiple Loose tubes |
| 4. | Glass yarns in between Steel tape & loose tubes |
| 5. | Sheath types (Inner and outer): HDPE for excellent crush resistance. |

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| 6. | Central strength member: FRP (Non-metallic) |
| 7. | Standards: ISO/IEC 11801 |
| 8. | IEC 60793-1/ 60794-1-2 |
| 9. | ITU-T-REC G.652D |
| 10. | Telecordia: GR-20 Core |
| 11. | Pulling tension: 2000N |
| 12. | Crush Load (N/ 100 mm): 4000N |
| 13. | The fiber type is a Matched Cladding Single Mode (9/125 micron) |
| 14. | Fiber dual coated with acrylate coating. |
| 15. | The fiber is optimized for operation at 1310 nm and at 1550 nm. |
| 16. | Germanium doped core with no phosphorus i.e. reduced tendency for hydrogen Degradation. |
| 17. | UV-curable dual layer acrylate coating, which ensures excellent micro bending and abrasion resistance. |
| 18. | OEM Authorization is mandatory to Bidder |
| 19. | Laying above OFC Cable |
| a | Installation of OFC Cabling including outdoor boxes Patch Chord in PVC 25mm conduit including laying, crimping, connecting. The vendor shall successfully demonstrate neat laying and robust connectivity at all times the points. Proper labeling shall be done at each points & connectivity diagram shall be provided |
| b | Digging/ Laying of fiber with Accessories |
| c | Digging / Laying / Back filling |
| d | Manual Digging ,Trenchless , Backfilling |
| e | All Culvert and road crossing must be through GI pipes. |
| f | PVC Conduit 25mm |
| g | Standard length of coil 300/500 m |
| h | TEC approved Including PVC Channel pipe Flexible pipe etc. |
| j | Prospective Bidders are advised to make site visit to understand the exact scope of work. |
| k | The vendor shall be responsible for proper quality of desired splicing/termination. The Installation/connectivity and any other work required like Power cabling, connector etc, To make the proper functional shall be sole responsibility of the vendor. |

14) CAT 6 Ethernet Cable

| S.No | General Specification |
|------|---|
| 1. | This cable well exceeds the requirements of TIA/EIA-568-C.2 and ISO/IEC11801and RoHS compliant. |
| 2. | Construction:4 twisted pairs separated by internal XShaped, 4channel, polymer spine/ full separator. Half shall not be accepted. |
| 3. | The 4pair Unshielded Twisted Pair Solid Bare Electrolytic Grade Copper cables shall be UL Listed. |
| 4. | Cable should UV Resistant, LSZH, Sheathed and Suitable for Outdoor Installations. |
| 5. | Cable should support TENSILE STRENGTH: >9MPa, (9000KN/Square Meter) |
| 6. | Attenuation (<17db), Pair-to-pair and PSNEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PSACR. |
| 7. | Nominal Outer Diameter of Cable should be 6.1mm and Conduct or Diameter 0.56mm (23AWG) |
| 8. | Cable should support operating Temperature from -20° to +60°C |
| 9. | Cable should come with printed sequential Length Counter on each meter |
| 10. | Cable support Conductor Resistance (DC): 7.2Ω/100MTR@20°C. MAX. |
| 11. | Mutual Capacitance of cable should be < 5.6nF/100m |
| 12. | Capacitance Unbalance of cable should max 330pF/100m |
| 13. | Cable support Delay Skew: < 45nS, Operating Voltage: 72V and NVP: 67% |
| 14. | Category6 UTP cables shall Supports Gigabit Ethernet (1000base-T) standard and Operates at bandwidth of250MHz. |
| 15. | Cabling with Accessories |
| 16. | Installation of Cat6 Cabling including outdoor boxes, Patch Chord etc in PVC 25mm casing including laying, crimping, connecting. The vendor shall successfully demonstrate neat laying and robust connectivity at all times the points. Proper labeling shall be done at each points & connectivity diagram shall be provided |
| 17. | Digging/ Laying of fiber with Accessories |
| 18. | Digging / Laying / Back filling |
| 19. | Manual Digging /Trenchless & Backfilling |
| 20. | All Culvert and road crossing must be through GI pipes. |
| 21. | PVC 25mm conduit |

| | |
|-----|---|
| 22. | Standard length of coil 300/500 m |
| 23. | TEC approved |
| 24. | Prospective Bidders are advised to make site visit to understand the exact scope of work. |
| 25. | The vendor shall be responsible for proper quality of desired splicing/termination. The installation/connectivity and any other work required like power cabling, connector etc., To make the proper functional shall be sole responsibility of the vendor. |

15) Power Cable 3 core Unarmored ISI mark

| S.No | General Specification |
|------|---|
| 1. | Supply/Laying/Fixing PVC insulated or PVC sheathed of 3x 2.5Sq mm copper conductor cable three core unarmored |

16) 42U Rack with Accessories

| S.No | General Specification |
|------|--|
| 1. | 42Urack(800x800x1957)withPDU,Fan&fixedTray,AccessorieswithpowerBoard having 5 Nos of 5 Amp switch and Socket, 5 no's of 15 Amp switch and Socket with Installation |
| 2. | Rack 42U Consisting of the following accessories |
| 3. | 1 Front perforated door 42U |
| 4. | 1 Rear Steel Door 42U |
| 5. | 4 Fan 80/90cfm 230 vac |
| 6. | 1 AC mains channel 7 points 5 amp Sockets Cable Manager 1U+hardware |
| 7. | Floor mount |
| 8. | Stationary Shelves -3 Nos. |

Technical Specification for Internet Protocol Based Access Control Systems

Description in general:

There shall be one master control station with enrollment unit and access software in control room, which shall be linked to all biometric system. Employees will be able to access all biometric system locations after their enrollment with their finger print or access card or password at the control station. Employees shall gains entry/exit access to the allowed access locations only.

Overview of the system

Proposed system consists of 23 nos of clean room IP based biometric, Password and RFID Access Card reader and controller, 43 nos of non clean room IP based biometric, Password and RFID Access Card reader and controller and required numbers of biometric enrollment unit , emergency switch, single door EM lock, double door EM lock, power Cable, CAT 6 Cable, Network Switch , access software, and smart card . The control room shall have all the instrument housed in an instrument rack.

The system shall consist of following main components:

Clean room based IP Based Biometric + password+ RFID Card Reader & controller

- a) Non Clean room based IP Based Biometric + password + RFID Card Reader & controller
- b) Biometric Enrollment Unit
- c) Emergency Switch
- d) Single Door EM Lock
- e) Double Door EM Lock
- f) Network Switch
- g) Storage
- h) Access Software
- i) Cables and accessories, etc.

Appendix – B

Smart card:

- a) Type: Smart card
- b) Operating Frequency: 13.56 MHZ
- c) Capability: contactless with read/write capability.

Biometric Finger Print, Password and Card Based Access Control Terminal

- a) Application: Access control system & time attendance
- b) Language: English
- c) Events/transactions: 100000 or more
- d) No. of finger template: up to 19000 (1:N)
- e) Operation mode: card only, finger only, card + finger + password.
- f) Mounting: on wall
- g) Enclosure: IP 55 or better
- h) Temperature: 0 degree C to 50 degree C.
- i) Humidity: 20% to 90 %
- j) Sensor: High quality scratch resistance optical sensor.
- k) Finger score: Display finger quality score at the time of finger registration.
- l) Image resolution: 500 DPI or better
- m) Template size: 384 bytes or better
- n) Image size: 272 x 320 pixel or better xv. FAR/FRR: < 0.001 %/0.1 %
- o) Verification time: < 1 sec.
- p) Operating frequency: 13.56 MHZ
- q) Display: 128 x 64 Graphical display or better
- r) Indication: Prominent audio & visual indication for acceptance/rejection of valid/invalid user.
- s) Controller ID: Up to 10000.
- t) Communication interface: TCP/IP, USB
- u) Intrusion integration: yes

GENERAL SPECIFICATION

- a) Smart cards shall be configurable for different users from time to time. Device shall have matching mode 1: N as well as 1:1. Most efficient Push Mechanism, for Multi Location Application, to push data from multiple locations to the central location almost in real time.
- b) Device shall be accessible with OTP (one time password) for fingerprint enrollment & changing of date and time. User enrollment & changes of date & time should not happen with normal.
- c) Data download should be automatic & extremely User friendly. 26,32,34,35 bit wiegand formats supported. Indication on unit for Transaction & Users buffer. Facility to create different Authority Levels for Supervisor/Administrator/User on the device. There should be a facility to verify card or Finger before admin login.
- d) All the events/Status messages should be displayed on LCD. Device should be highly secured so that it can communicate with the selected IP only. Device should not accept continuous swipes. Reader shall flash LED and emit a short beep indicating that a card was read. System should work with 5,8,10 digit card number. Employee Name/Employee code/card number should be displayed on the LCD screen along with Access granted.
- e) There should be facility to adjust the Finger Rejection ratio as per the client needs/environment. All controller information should be readable using keypad in offline mode. Bulk card adding through device. Time based Scheduler for automatic activate-deactivate of cards
- f) The reader should function and record attendance even in standalone mode when network fails. Common message display on the LCD should be possible. If any person is trying to open the device an alarm should be raised. Device should work on Dynamic IP in case of multi-location/multi devices, no need of Static IP at every location. Ability to respond to access requests/alarm conditions before and during download.
- g) Template size 384 bytes or better Capacity to store up to 8 templates per user to avoid finger rejection. The device shall be fitted with automatic restart facilities to enable them to resume processing following a power and backup failure. Device should have inbuilt

Watchdog feature. The machine should have inbuilt RTC. Provision for setting the time of all machines from a single location to maintain uniform time in all locations.

- h) The connectivity of the devices should be detected remotely from remote machine, should have inbuilt capability for online firmware up gradation.
- i) The outer coating should be noncorrosive. Total Indian Manufacturing Technology to enable better service and support. There should be a facility to trigger 3rd party devices like Siren etc. on critical events. Holidays should be reader wise settable. Provision for silent alarms, if any unknown person tries to intrude on gun point.
- j) Device should support any type of locking devices & remote controlled exit switch/ Standard Egress Switch. The controller must have inputs for door sensor. Device should support any Wiegand readers. Opening and closing of the doors should be possible from PC. The controller must support intrusion i/p. Access group definition, assignment, activation, and deactivation should be possible from software.
- k) The Finger scan scanner shall be of High Protection from Scratch i.e. Upper surface shall be scratch resistant and Protection from ESD. Scalable System to support GPRS and Template on card if required. Provision for Finger print, expiry date, access mode should be stored on the card. Real time auto update of finger impressions.
- l) There should be a facility to block certain employee's access to certain areas due to some reason. Device should support different Anti Pass back i.e. Hard, Soft, Escort (Reader Wise).

Access software:

- a) Software shall be an enterprise level access management and entry report management software which comprises of Windows based transaction server software which collects data from door access controllers on real time basis.
- b) The web based software allows user management; device management; settings like time set, time zone, holidays and real time monitoring of reports.
- c) Software shall generates various entry reports like ALL entries, first & last entry,

IN/OUT entry, Who is where report based on selectable options of users, user groups, date and time. These reports can be exported in Excel, PDF, CSV formats to integrate with any third party software.

- d) The software shall support access levels for managing, configuring and monitoring the system. The software supports bulk user addition and also has provision of adding the photographs of each of the user.
- e) The software shall support database backup, restore, export, import, archival, validation.
- f) Access management data can be linked with payroll system.
- g) The access control system shall be modular and distributed.
- h) Any unauthorized attempt or invalid card used shall be reported, including door held and forced opened alarm as priority alarm transactions.
- i) Wiegand, Serial, door setting can be configured through access control software.
- j) Network setting (IP and server IP) can be set and reset with ease.
- k) Access bank, Time set, Time Zone, Holidays, Access Group can be downloaded from or uploaded into any controller present on the network.
- l) Online floor map feature to monitor controllers with user friendly GUI.

Terms and Conditions:

- a) The firm shall carry out complete work of laying, installation, commissioning of all cables, auxiliaries, software, and hardware as per norms on turnkey basis.
- b) The firm shall visit PIIC to learn the exact requirement and collect details of the existing location to carry out design & preparation of connectivity diagram etc.
- c) Smart cards should be configurable for different users from time to time.
- d) The firm shall provide complete documentation i.e technical catalogue for various components, power/signal diagram, test certificate if any, warranty certificates, user manuals etc.

- e) The firm shall arrange all labour, cabling, tools & other parts required to install, commission and testing of the access control system.
- f) The firm shall provide training to PIIC personnel on maintenance and operation aspects of access control system.
- g) The firm shall demonstrate setup/ disassemble of the units described within the specification. The firm shall provide the technical literature of each component of access control system. Datasheet, wiring diagram in the connection block diagram, operating & maintenance manual etc.
- h) The offered Access Control system must have warrantee for minimum 2 years.
- i) The BOQ mentioned above is just indicative and any other item / hardware / software /cable if required to complete the work will have to be supplied by the firm.

SECTION – IV

Statement of Credentials

Annexure -1

Note:Tenderers should fill their technical offer by providing all information as follows
(If not applicable- Please mention as 'N/A'):

Capability Statement

| S.No | Description | |
|------|---|--|
| 1. | Name of the Firm | |
| 2. | Nature of the Firm(State whether Limited Company, partnership Firm, Co-op. Society or Sole Proprietor, Photocopies of documents Confirming constitution of the firm to be enclosed) | |
| 3. | Year of Establishment | |
| 4. | Registration Number, if any | |
| 5. | Registered Postal Address | |
| 6. | Telegraphic Address, if any | |
| 7. | Telephone No. (s) | |
| 8. | Fax No. (s), if any | |
| 9. | E-mail ID, if any | |
| 10. | Address of Branches, if any | |
| 11. | GST registration number | |
| 12. | PAN Number | |
| 13. | Name of Directors/ partners / Proprietor (as The case may be) with address & Telephone Numbers. | |
| 14. | Permanent Income Tax No. | |
| 15. | Last Income Tax Clearance (Attach Photocopy) | |

| | | |
|-----|--|--|
| 16. | Sales Tax Registration (state/ VAT/ CST) | |
| 17. | Excise Registration | |
| 18. | Name of Bankers & Branch with full address | |
| 19. | Type of Account & A/C No. | |
| 20. | Name (s) of Authorized Representatives (s) Note: Power of Attorney signed by the Director(s)/ | |
| 21. | Partners / Proprietor in favour of the authorized Person signing the tender documents must be enclosed | |
| 22. | Were you associated with PIIC in any other contract in the past? | |
| 23. | Are you currently having any contract with PIIC? | |
| 24. | Are you on the approved list of other Pharma / Vaccine companies/ Public Sector Undertakings / govt. Dept. Etc. If so, furnish true copies of Certificates certifying your performance | |
| 25. | Please confirm that you have qualified/ trained / experienced staff on your payroll to handle this job | |
| 26. | Confirmed that Bank Guarantee will be provided For the Security deposit / performance security. | |
| 27. | Whether the bidder is put on Holiday list of any of the PSU. (If sought later, an affidavit to be produced later to PIIC.) | |

| | | |
|-----|--|--|
| 28. | Products/Services offered by the organization | |
| 29. | Details if any, about specialization in the area/field | |
| 30. | Brief on the strength of the organization | |

Signature, name and designation of authorized signatory

Annexure – 2

Financial Information

Please provide Chartered Accountant certified financial information of the three last declared financial years.

| | 2017-2018 | 2018-2019 | 2019-2020 |
|------------------------|-----------|-----------|-----------|
| Annual Turnover | | | |
| | | | |
| | | | |
| | | | |

NOTE: Please attach copies of relevant financial statement and audited accounts for the three last declared financial years

Annexure - 3

Statement of Experience and Competence in Related Area/Field

Work completion certificate in the field of IP based CCTV and Access Control Systems during last three years clearly indicating the following

- a) Name of work
- b) Date of start
- c) Date of Completion (as per agreement)
- d) Actual date of completion
- e) Total Value of work done
- f) Performance of work

NOTE: Please Furnish the copies of satisfactory job completion certificates along with copies of work awards/job orders.

Annexure – 4

Statement of Technical Manpower Available in Related Areas/Field

| S.No | Name of Employees | Permanent/ Temporary | Total Experience | Qualification with year of passing | Specialisation Area/Field |
|------|-------------------|----------------------|------------------|------------------------------------|---------------------------|
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Signature ,name and designation of authorized signatory

SECTION-V

BANK GUARANTEE PROFORMA FOR EARNEST MONEY DEPOSIT / BID SECURITY

(On non-judicial paper of Rs. 200/-)

To

The Director,
Pasteur Institute of India,
Coonoor.

Dear Sirs,

M/S..... are giving tender for the work of " Supply, Installation, commissioning & testing of clean room and non clean IP based CCTV and access control system" at PIIC.

The General Tender Notice provides that the bidder shall along with his tender pay a sum of Rs.....(Rupees.....)for the Pasteur Institute of India, Coonoor as Earnest Money Deposit / Bid Security, in the form therein mentioned.

The form of payment of earnest money includes guarantee executed by a scheduled bank, undertaking full responsibility to indemnify Pasteur Institute of India, Coonoor in case of default. The said has approached us and at their request and in consideration of the premises we having our office at have agreed to give such guarantee as hereinafter mentioned.

1. We hereby agree with you that if default shall be made by in observing performing any of the terms and conditions of the tender, given by them or in payment of any money payable to you under the terms of the tender, we shall, on demand, pay to you in such manner as you direct the said amount of Rupeesonly or such portion thereof not exceeding the said sum as you may from time to time require.

2. You will have the full liberty without reference to us and without affecting this guarantee to postpone for any time or from time to time the exercise of any of the powers and

rights conferred on you under the tender given by the said and to enforce or to forbear from enforcing any powers or rights or by reason of time being given to said which under law relating to the sureties would but for the provision have the effect of relating us.

3. Your right to recover the said sum of Rs.....(Rupees)
from us in manner aforesaid will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said and / or that any dispute or disputes are pending before any Officer, tribunal or court.

4. The guarantee herein contained shall not be determined or affected by the liquidation or winding up, dissolution or change of constitution or insolvency or the said but shall in all respects and for all purposes be binding and operative until payment of all moneys, due to you in respect of such liability or liabilities, is made.

5. We have power to issue this guarantee in your favour under our Memorandum and Articles of Association and the undersigned has full power to do the Power of Attorney dated Granted to him by the Bank.

Yours faithfully,

.....Bank, by its
Constituted Attorney

Signature of a person duly authorized
To sign on behalf of the Bank.

SECTION-VI

BANK GUARANTEE PROFORMA FOR SECURITY DEPOSIT / PERFORMANCE SECURITY

(On non-judicial paper of Rs. 200/-)

1. In consideration of Pasteur Institute of India (registered under the Societies Act 1860) is an autonomous Institute under the Ministry of Health and Family Welfare Located at Coonoor - 643103 herein after called "PIIC" which expression shall, unless repugnant to the context or contrary to the meaning thereof, include its successor and assigns, having invited/ floated Tender to _____ Proprietors/Partnership Firm/ Company registered under the Indian Partnership Act 1932/ the Companies Act of 1956, having its office at(hereinafter called "The Tenderer" which expression shall, unless repugnant to the context or contrary to the meaning thereof, include its successors and Assigns vide Tender No..... dated..... (hereinafter called "The Tender" which expression shall any amendments/alterations to the Tender by PIIC for Design, Supply, Installation, commissioning & testing of clean room and non clean IP based CCTV and access control system for PIIC and PIIC having agreed not to insist upon immediate payment of Earnest Money for the fulfillment and the performance of the said Tender in terms thereof on production of an acceptable Bank Guarantee for an amount of Rs.....(Rupees.....Only). We..... having office..... (hereinafter referred to as "The Bank" which expression shall, unless repugnant to the context or contrary to the meaning thereof, include its successors and assigns at the request and on behalf of the Tenderer hereby agree to pay PIIC without any demur on first demand an amount not exceeding Rs.....(Rupeesonly) against any loss or damage, costs, charges and expenses caused to or suffered by PIIC by reason or non performance and non-fulfillment or for any breach on the part of the Tenderer of any terms and conditions of the said Tender.

2. We, further agree that PIIC shall be the Sole judge whether the said Tenderer has failed to perform or fulfill the said Tender in Terms thereof or committed breach of any of the terms and conditions of the Tender and the extent of loss, damage, costs, charges and expenses suffered or incurred or would be suffered or would be incurred by PIIC on account thereof

3. Wefurther agree that the amount demanded by PIIC a shall be final and binding on the Bank under take to pay the PIIC. the amount so demanded on the first demanded and without any demur notwithstanding any dispute raised by the Tenderer or suit or other legal proceedings including Arbitration pending before any court, tribunal or arbitrator relating thereto, our liability under this guarantee being absolute and unconditional.

4. WeBank, further agree with the PIIC that at PIIC shall have fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Tender or extend time of the performance by the Tenderer from time to time or to postpone for any time to time any of the powers exercisable by PIIC against the Tenderer and to forbear to enforce any of the terms and conditions relating to the Tender and we shall not be relieved from our liability by reason or any such variation or extension being granted to the Tenderer or any forbearance, act or omission on the part of the PIIC or any indulgence by PIIC to the Tenderer or by any such matter or things whatsoever which under the law relating to sureties would but for this provision have the effect of relieving us.

5. NOTWITHSTANDING anything herein before contained, our liability under this guarantee is restricted to Rs. (Rupees.....Only).Our liability under this guarantee shall remain in force until expiration of 60 days beyond the date of completion of all the contractual obligations of the Tender. Unless a demand or claim under guarantee is made on us in writing within the said period, that is, on or before.....all rights of the Messer under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

6. We..... Bank; further undertake not to revoke this guarantee during its currency except with the previous consent of PIIC in writing.

This guarantee shall not be affected by any change in the constitution of the Tenderer or the Bank or PIIC and shall remain in full force and effect until the liabilities of the Bank are discharged by PIIC. IN WITNESS WHEREOF the Bank has executed the Bank has executed this document on this.....day of.....2020.

For.....Bank

* Pl. mention / put specific date

SECTION-VII

INTEGRITY PACT

Between

Pasteur Institute of India, Coonoor (PIIC) hereinafter referred to as "The Principal",

And

M/s _____ hereinafter referred to as "The Vendor"

Preamble

The Principal intends to award, under laid down organizational procedures, contracts for Supply, Installation, testing & commissioning of Clean Room & Non-Clean Room IP based CCTV, Access Control and their back-up Systems. The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal will appoint a security deposit / performance security to committee the tender process and the execution of the contract for compliance with the principles mentioned.

Commitments of the Principal

- a) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
- b) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
- c) The Principal will, during the tender process treat all Bidders with equity and reason. The principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
- d) The Principal will exclude from the process all known prejudiced persons.

- e) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

For "The Principal"

For "The Vendor"

Commitments of the Vendor

- a) The vendor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- b) The Vendor will not, directly or through any other person or firm, offer, promise or give to any of the Principal employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- c) The Vendor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- d) The Vendor will not commit any offence under the relevant Anti-corruption Laws of India; further the Vendor will not use improperly, for purposes of competition or personal gain, or pass on to others any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- e) The Bidder / Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- f) The Bidder / Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Disqualification from tender process and exclusion from future contracts

- a) If the vendor before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.
- b) If the vendor has committed a transgression through a violation of Section-2 such as to put his reliability or credibility into question, the principal is entitled also to exclude

the vendor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

- c) A transgression is considered to have occurred if the Principal after due consideration of the available evidence, concludes that no reasonable doubt is possible.
- d) The vendor accepts and undertakes to respect and uphold the principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- e) If the vendor can prove that he has restored / recouped the damage caused by him and has installed a suitable corruption prevention system, the principal may revoke the exclusion prematurely.

For "The Principal"

For "The Vendor"

Compensation for Damages

- a) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit / Bid Security / Bid Security.
- b) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to Security deposit / performance security / Performance Bank Guarantee.
- c) The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder / Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder / Contractor shall compensate the principal only to the extent of the damage in the amount proved.

Previous transgression

- a) The Bidder declares that no previous transgressions occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- b) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Equal treatment of all Bidders / Contractors / Subcontractors

The Bidder / Contractor undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors & Subcontractors. The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

For "The Principal"

For "The Vendor"

Criminal charges against violating Bidders / Contractors / Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion this regard, the Principal will inform the Vigilance Office.

An Internal Security deposit / performance security with a Chairperson (4 Members or to be decided by the Director, PII, Coonoor)

- a) The Principal appoints competent and credible internal security deposit / performance security for this Pact. The task of the security deposit / performance security is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- b) The security deposit / performance security performs their functions neutrally and independently. The security deposit / performance security reports to the Director, Pasteur Institute of India, Coonoor.
- c) The Contractor accepts that the security deposit / performance security has the right to access without restriction to all project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the security deposit / performance security, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The security deposit / performance security is under contractual obligation to treat the information and documents of the Bidder / Contractor with confidentiality.
- d) The Principal will provide to the security deposit / performance security sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the principal and the Contractor. The parties offer to the security deposit / performance security the option to participate in such meetings.
- e) As soon as the security deposit / performance security notices, or believes to notice, a violation of this agreement, the security deposit / performance security will so inform the Director, Pasteur Institute of India, Coonoor and request the to discontinue or heal the violation, or to take other relevant action. The security deposit / performance security can in this regard submit non-binding recommendations. Beyond this, the committee has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However the Internal committee shall give an

opportunity to the bidder / contractor to present their case before making its recommendation to the Principal.

- f) The Committee will submit a written report to the Chairperson of the committee of the Principal within 8 to 10 weeks from the date of reference or intimation to the committee by the 'principal' and, should the occasion arise, submit proposals for correcting problematic situations.
- g) If the Committee has reported to the Chairperson of the committee a substantiated suspicion of an offence under relevant Anti-corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Committee may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

For "The Principal"

For "The Vendor"

Pact Duration

- a) This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.
- b) If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairperson of the Principal.

Other Provisions

- a) This agreement is subject to Indian Law, Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Coonoor / Nilgiris. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.
- b) Changes and supplements as well as termination notices need to be made in writing. Side Agreements have not been made.
- c) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- d) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

For "The Principal"

For "The Vendor"
(Name & Signature with Seal)

Witness
1.....

Witness
1.....

2.....

2.....

Place: Coonoor

Date:

SECTION – VIII

Self – Declaration of Blacklisting

To

The Director

Pasteur Institute of India

Coonoor – 643103

In response to this NIT documents pertaining to empanelment for IP based CCTV surveillance systems & Access Control Systems work, I/We hereby declare that presently our company/firm _____ is having unblemished record and is not declared ineligible for corrupt & fraudulent practices either indefinitely or for a particular period of time by any PIIC/State/Central Government/PSUs/Autonomous Body.

We further declare that presently our company /firm _____ is not blacklisted and not declared ineligible for reasons other than corrupt & fraudulent practices by any PIIC/State/Central Government/PSUs/Autonomous Body on the date of Bid Submission.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/our security may be forfeited in full and the empanelment if ant to the extent accepted may be cancelled

Thanking You

Name of the Vendor:

Authorized Signatory:

Seal of the Organization:

Date:

Place:

PART- 2
Section - IX

Financial Bid

Supply, Installation, Testing and Commissioning of IP based CCTV Surveillance system , Access Control Systems and Comprehensive Annual Maintenance for 03 years at PIIC

| S No | Item Description | Qty | Unit | Rate per unit | Amount |
|--------------------|--|-----|------|---------------|--------|
| Sub Head-A. | | | | | |
| 1. | Supply, Install, Commission and testing of 5megapixel indoor dome Camera as per complete technical specifications given in Appendix-A or as per site requirement. | 56 | Nos | | |
| 2. | Supply, Install, Commission and testing of 5megapixel outdoor bullet Camera as per complete technical specifications given in Appendix-A or as per site requirement. | 71 | Nos | | |
| 3. | Supply, Install, Commission and testing of 8megapixel outdoor bullet Camera as per complete technical specifications given in Appendix-A or as per site requirement | 12 | Nos | | |
| 4. | Supply, Install, Commission and testing of IP66 Box with MCB and Fibber Splicing Tray, as per complete specification given in Appendix-A or as per site requirement. | 02 | Nos | | |
| 5. | Supply, Install, Commission and testing of 32Ch NVR with RAID5 Configuration, as per complete technical specification given in Appendix-A or as per site requirement. | 06 | Nos | | |
| 6. | Supply, Install, Commission and testing of 16 port PoE network switch as per complete specification given in Appendix-A or as per site requirement. | 09 | Nos | | |
| 7. | Supply, Install, Commission and testing of 24 port PoE network switch as per complete specification given in Appendix-A or as per site requirement. | 03 | Nos | | |
| 8. | Supply, Install, Commission and testing of storage Server, as per complete specification given in Appendix-A or as per site requirement. | 01 | No | | |
| 9. | Supply, Install, Commission and testing of C&C client Software with, Integrated with VMS, AI Video Analytics, Maps, Hot Screen, ,as per specification given in Appendix-A. | 01 | No | | |
| 10. | Supply, Install, Commission and testing of Workstation for ANPR as per complete specification | 01 | No | | |

| | | | | | |
|--------------------|---|------|------|--|--|
| | given in Appendix-A or as per site requirement | | | | |
| 11. | Supply, Install, Commission and testing of FHD Vari-Focal IR Bullet Camera for ANPR complete with mounting bracket, accessories licenses and softwares as per technical specifications given in Appendix-A or as per site requirement | 02 | Nos | | |
| 12. | Supply, Install, Commission and testing of Workstation as per complete specification given in Appendix-A or as per site requirement. | 10 | Nos | | |
| 13. | Supply, Install, Commission and testing of 12 Core Optic Fiber Cable with 25mm PVC conduit and accessories as per specification given in Appendix-A or as per site requirement. | 1500 | Mtrs | | |
| 14. | Supply, Install, Commission and testing of CAT-6 with 25mm PVC Conduit / Batten with accessories as per complete specification given in Appendix-A or as per site requirement. | 1500 | Mtrs | | |
| 15. | Supply, Install, Commission and testing of 3 Core 2.5 Sq. mm unarmored copper Power Cable with 25mm PVC conduit as per complete specification given in Appendix-A or as per site requirement. | 500 | Mtrs | | |
| 16. | Supply, Install, Commission and testing of Wall Mount 6U for Mini Control Room per complete specification given in Appendix-A or as per site requirement | 06 | Nos | | |
| 17. | Supply, Install, Commission and testing of floor Standing 42U or as per site requirement Network Rack with Fixed Structure Integrator should be ISO 9001:2008 Certified per complete specification given in Appendix-A or as per site requirement | 01 | No | | |
| 18. | Supply, Install, Commission and testing 1.5 Ton split Air conditioner – Inverter type with minimum 3* energy rating | 01 | No | | |
| 19. | Supply, Install, Commission and testing of 50” monitor as per complete specification given in Appendix-A or as per site requirement | 04 | Nos | | |
| Sub Head-B. | | | | | |
| 20. | Clean room IP based biometric, Password and RFID Access Card reader and controller with single and double leaf electromagnetic lock as per complete specification given in Appendix-B or as per site requirement | 23 | Nos | | |

| | | | | | |
|----------------------------------|--|----|------|--|--|
| 21. | Non-clean room IP based biometric, Password and RFID Access Card reader and controller with single and double leaf electromagnetic lock as per complete specification given in Appendix-B or as per site requirement | 43 | Nos | | |
| Sub Head-C | | | | | |
| 22. | CAMC 1 st year after warranty | 1 | Year | | |
| 23. | CAMC 2 nd year after warranty | 1 | Year | | |
| 24. | CAMC 3 rd year after warranty | 1 | Year | | |
| Grand Total - (A + B + C) | | | | | |
| (Amount in Words) | | | | | |

Note:

- 1) **All the quoted rates for all the above items shall be priced at the prevailing market rate.**
- 2) **The all quoted rates should be inclusive of GST & other taxes. The items mentioned in BoQ are approximate quantity. IP CCTV systems, Access Control Systems, backup system,cables and allied items may be increased or decreased. However the payment will be made as per actual basis.**

I/we have read the conditions of contract carefully and am/are ready to carry out the same job at the rate mentioned against each item of the above mentioned schedule.

Signature of the Firm with Seal