

NIT NO	A.O. Mohali/CCTV/2024/02
DATE	31.05.2024

e-TENDER



STATE BANK OF INDIA

PART-A

TWO BID TENDER SYSTEM **THROUGH E-TENDERING PROCESS**

Note: Bidder should possess valid digital signature for this e-tender

TECHNICAL BID FOR PRE QUALIFICATION

E-TENDER FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF CCTV SYSTEM & THEIR MAINTENANCE (INCLUDING MAINTENANCE OF EXISTING CCTV SYSTEM) AT BRANCHES / OFFICES / CELLS OF STATE BANK OF INDIA, ADMINISTRATIVE OFFICE, MOHALI, PUNJAB.

**The Deputy General Manager (B&O)
State Bank of India
Administrative Office Mohali
Corporate Plot No. 89, Sector -68 ,
Mohali (Punjab)-160062**



ਭਾਰਤੀ ਸਟੇਟ ਬੈਂਕ / भारतीय स्टेट बैंक / State Bank of India
ਪ੍ਰਸ਼ਾਸਨਿਕ ਦਫ਼ਤਰ, ਪ੍ਰਸ਼ਾਸਨਿਕ ਕਾਰਜਾਲਯ, Administrative Office,
ਮੋਹਾਲੀ ਮੋਹਾਲੀ Mohali, ਪਲਾਟ ਨੰ. ਪਲਾਟ ਨੰ. ਪਲਾਟ ਨੰ. Plot No. 89
ਸੈਕਟਰ -68 ,
ਮੋਹਾਲੀ) ਪੰਜਾਬ (ਮੋਹਾਲੀ) ਪੰਜਾਬ) Mohali (Punjab) 160062

Tender Number SBI/AO-MOHALI/CCTV/2024/02

DATED :- 31.05.2024

NOTICE INVITING TENDERS (NIT)

State Bank of India (SBI) invites e-TENDERS from all the empanelled vendors of Local Head Office Chandigarh under respective categories. Details of tenders are as under:

1.	Name of Work	<u>e-Tender</u> for supply, installation, testing & commissioning of CCTV System & their maintenance (including maintenance of existing CCTV SYSTEM) at Branches / Offices / Cells of State Bank of India, Administrative Office, Mohali, Punjab.
2.	Time allowed for completion	As per tender documents
3.	Earnest Money Deposit	Rs. 35,000/- (Rupees Thirty-Five Thousand Only) crossed Bank draft / Banker's Cheque draw in favour of State Bank of India payable at Mohali. No exemption for MSME Bidders.
4.	Security Deposit	5% of the accepted value of contract excluding earnest money
5.	Cost of tender documents	NIL
6.	Date of download of tender documents from Bank's web site http://www.sbi.co.in under "SBI in the news" in "procurement news" and and https://www.tenderwizard.com/SBITENDER	31.05.2024 (Friday)
7.	Pre-Bid Meeting at Conference Room at Second Floor) Deputy General Manager (B&O) State Bank of India Administrative Office Mohali Corporate Plot No. 89, Sector -68 , Mohali (Punjab)-160062	05.06.2024 (Wednesday)
8.	Last date and time for receipt of written queries for clarification from bidders	10.06.2024
9.	Last date and time for submission of online e-tender.	20.06.2024 (Thursday) till 05.00 PM at https://www.tenderwizard.com/SBITENDER
10.	Date and time of opening of e- tender (Technical Bid)	24.06.2024 (Monday)- Technical Bid (11.00 AM) 24.06.2024 (Monday)- Financial Bid (3.00 PM) Place of opening e-tenders –Online at https://www.tenderwizard.com/SBIETENDER through service provider.
11.	Address at which the EMD & tenders are to be submitted and Address for Communication	Deputy General Manager (B&O) State Bank of India Administrative Office Mohali Corporate Plot No. 89, Sector -68 , Mohali (Punjab)-160062
12.	Contact person	CM (SECURITY) State Bank of India Administrative Office Mohali Corporate Plot No. 89, Sector -68 , Mohali (Punjab)-160062 cmsecurity.zomohali@sbi.co.in , 0172-2247432 0172-2247421
13.	Bidder Contact Details	Bidder to Provide following information:

		1.Name of the Company 2.Contact Person 3.Mailing address with Pin Code 4.Telephone number and Fax number 5.Mobile Number& E-MAIL
14.	Date of Price Bid Opening	Duly authorised Representative of empanelled vendors may be present during opening of Price Bid. However Bids would be opened even in the absence of any or all of the Bidder's representatives.
15.	Agency for arranging online bidding at https://www.tenderwizard.com/SBIETENDER	M/s. Antares Systems Limited, Registered Office: #24, Sudha Complex, 3rd Stage, 4th Block, Bangalore – 560079, Karnataka. Help Desk: 7503347659 / 9044314492/ 9073677150/ 151 / 152 / 9674758506 / 9674758723/26 Contact Persons: (On working days 9 AM to 6 PM) 1. Mr. Abhay kumar Singh Mobile No.: +91 9708966660 e-Mail: abhaykumar@antaressystems.com 2.Mr. Pravesh Mobile No.: +91 9044314492 e-Mail: praveshmani.t@antaressystems.com
16.	Period of contract	The work shall be awarded for initial period of one year from the date of commencement of the work subject to its renewal for a maximum of Two similar terms on expiry of the contract period within sole discretion of the Bank, subject to satisfactory performance of the vendor.
17.	Validity of offer	180 DAYS from last date of tender submission
18.	Liquidated Damages	As per tender documents
19.	Value of Interim Certificate	NIL
<p>A. With reference to tender/ RFP uploaded online, we hereby advise that application along with all attachments as mentioned below, <u>duly signed by hand with seal by the Authorised Signatory of the firm/Company as acknowledgment of accepting the laid down terms and conditions</u> supply, installation, testing & commissioning of CCTV System & their maintenance (including maintenance of existing CCTV SYSTEM) at Branches / Offices / Cells of State Bank of India, Administrative Office, Mohali, Punjab. Please acknowledge to understand and abide by the standard tender process as below: -</p> <p>B. The tender should be quoted & submitted as per application format and terms & conditions, copy of which is enclosed herewith as <u>Annexure- 'A'</u> to <u>Annexure -"G"</u> . The L-1 rates will be decided on the basis of tender on the basis of overall total of rates of the items and Annual Maintenance Contract (AMC) draft format of which is attached as <u>Annexure "P"</u>.</p> <p>C. The Technical Bid of the e-Tender is required to be submitted online. "Technical Bid for CCTV System" should be accompanied by the following:-</p>		
i	Vendor Application Form	<u>Annexure- 'A'</u>
ii	Earnest Money Deposited Details	<u>Annexure- 'B'</u>
iii	Terms and conditions as per standard draft Service level Agreement (SLA) format, duly signed, with Vendor's stamp / seal (on all pages) by the authorized signatory of the vendor	<u>Annexure- 'C, D & E'</u>

iv	Terms and Conditions, undertaking by vendors duly signed and stamped	<u>Annexure-'F'</u>
v	Minimum Standard Configurations	<u>Annexure -'G'</u>

vii	Price Bid	<u>Annexure – 'P'</u>
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D. The technical Bids are **also** required to be submitted in **Sealed Envelope(s)** as explained below.

Super scribed as "**TECHINCAL BID FOR CCTV SYSTEM.**" The under mentioned documents **duly signed by hand (on all pages) by authorised signatory of the firm/company should be submitted** as part of the "Technical Bid" in two envelopes as given below: -

Envelope No. 1

i	Vendor Application Form	<u>Annexure- 'A'</u>
ii	Earnest Money Deposited Details	<u>Annexure- 'B'</u>
iii	Terms and conditions as per standard draft Service level Agreement (SLA) format, duly signed, with Vendor's stamp / seal (on all pages) by the authorized signatory of the vendor	<u>Annexure- 'C, D & E'</u>
iv	Terms and Conditions, undertaking by vendors duly signed and stamped	<u>Annexure-'F'</u>
v	Minimum Standard Configurations	<u>Annexure -'G'</u>

The sealed 'Technical Bids' in a separate envelope (**Envelope-2**) subscribed as "**TECHINCAL BID FOR CCTV SYSTEM AO MOHALI.**" should reach the Bank by **05.00 PM on 20 Jun 2024 as above.**

Price bids need not be placed in above mentioned envelope, as price bid is to be submitted on online portal, if found, bid is liable to be rejected.

A Pre-Bid Meeting with representatives of the Participating bidders shall be held at the above office **on 05 Jun 2024 at 11.00 AM.** The **Technical Bid** of the Tender shall be opened on **24 Jun 2024 at 11.00 AM.** by the committee constituted for the purpose, at Administrative Office, Mohali, Punjab. The Vendor may come personally or depute an authorised representative to be present during Pre-Bid Meeting, opening of Technical Bid, Price Bid and Lottery if more than one L-1 bidders. The Tender shall be valid for a period of 180 days from the last date of submission.

After opening of **Envelope containing- Technical Bid**, in case vendor is not found technically suitable or not complying with the terms & conditions of the tender, price bid of the said tenderer shall not be opened/considered(Online).

Any deviation in the above procedures for submission of tender may attract disqualification of the vendor from the tendering process. Conditional tenders will not be considered and will be rejected outrightly. The vendor is advised to study the Tender Documents thoroughly. Submission of Tender shall be deemed to have been submitted after careful study & examination of Tender Document with full understanding of its implications. Tender without valid signature & stamp will be rejected.

Any clarification issued by SBI will be in the form of an addendum /corrigendum and will be available in SBI's website –<https://sbi.co.in> under "SBI in the news" in "procurement news" / <https://etender.sbi> and at <https://www.tenderwizard.com/SBIETENDER> . The amendment will be binding on all bidders. SBI, at its discretion may extend the deadline for submission of bids which shall be informed to all through SBI's website <https://sbi.co.in> (SBI in the news/procurement news) and at <https://etender.sbi>.

In case the day of opening of Technical Bids etc is declared a holiday, the tender will be opened on the next working day at the same time. The Bank does not bind itself to accept the lowest tender and reserves its right to split or reject any or

all offers without assigning any reason, whatsoever. Non-participation of empanelled vendors in the tender process may attract disqualification / de-panelement from Bank's panel. The copy of the rates quoted by the vendors in the tender shall not be given to the other vendors.	
SBI has the right to accept/reject any/all tenders without assigning any reasons.	
In case of any doubt, the vendors may seek clarification from the Security Section, State Bank of India, Administrative Office (MOHALI), Plot No. 89, Sector -68 ,Mohali (Punjab) 160062 Telephone No. 2247432, 2247421 email id: - cmsecurity.zomohali@sbi.co.in	

Note:-

1. Only those Bidders who qualify in Technical evaluation would be shortlisted and the online price bids submitted by the shortlisted bidders will only be opened. However these Price Bids would remain undisclosed to the Bidders.
2. If the L1 bidder refuses to give the PBG, then the EMD will be forfeited and the tender will be re-invited. The L1 bidder will not be allowed to participate in the retendering process.
3. Firm can visit the website (<https://www.tenderwizard.com/SBIETENDER>) for submission of online tenders. For any website related queries **M/s. Antares Systems Limited may be contacted.**

SAMPLE BUSINESS RULE DOCUMENT

E-TENDER FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF CCTV SYSTEM & THEIR MAINTENANCE (INCLUDING MAINTENANCE OF EXISTING CCTV SYSTEM) AT BRANCHES / OFFICES / CELLS OF STATE BANK OF INDIA, ADMINISTRATIVE OFFICE, MOHALI, PUNJAB.

(A) Business rule for E-tendering:

1. All the contractors as per the criteria of tender in providing YYYY shall be eligible to participate.
2. SBI will engage the services of an E-tendering service provider who will provide necessary assistance before commencement of online bidding on Internet.
3. In case, there is any change in e-tendering service provider, the SBI will inform the qualified bidders suitably at appropriate time.
4. Business rules like event date, closing and opening time etc will be communicated through service provider for compliance.
5. Contractors have to send by email, the compliance form in the prescribed format (provided by service provider), before start of E-tendering without which, bidders will not be eligible to participate in the bidding process.
6. E-tendering will be conducted on schedule date & time.
7. The e-tendering will be treated as closed only when the bidding process gets closed in all respects for the item listed in the tender.

(B) Terms & conditions of E-tendering:

SBI shall finalize the online price bid tender through e-tendering mode for which M/s. Antares Systems Limited . Has been engaged by SBI an authorized service provider. Please go through the guidelines given below and submit your acceptance to the same.

1. E-tendering shall be conducted by SBI through M/s. Antares Systems Limited, on pre-specified date . While the Contractors shall be quoting from their own offices/ place of their choice, Internet connectivity and other paraphernalia requirements shall have to be ensured by Contractors themselves. In the event of failure of their Internet connectivity, (due to any reason whatsoever it may be) it is the bidders' responsibility.
2. In order to ward-off such contingent situation, bidders are requested to make all the necessary arrangements / alternatives such as back- up power supply etc. whatever required so that they are able to circumvent such situation and still be able to participate in the E-tendering successfully.
3. Failure of power at the premises of Contractors during the E-tendering cannot be the cause for not participating in the E-tendering. On account of this, the time for the E-tendering will not be extended and SBI shall not be responsible for such eventualities.
4. M/s. Antares Systems Limited, Bangaluru shall arrange to provide necessary assistance to your nominated person(s). They shall also explain you all the Rules related to the E-tendering . You are required to give your compliance on it before start of bid process.
5. **BIDDING CURRENCY AND UNIT OF MEASUREMENT:** Bidding will be conducted in Indian currency & Unit of Measurement will be displayed in Online E-tendering.
6. **BID PRICE:** The Bidder has to quote the rate as per the Tender Document provided by SBI, and rates for all the items are required to be quoted.
7. **VALIDITY OF BIDS:** The Bid price shall be firm for a period specified in the tender document and shall not be subjected to any change whatsoever.

8. Procedure of E-tendering:

Online E-tendering:

- I. The Price Bids will be available on the Bank's website during the period specified in the NIT.

- II. Online e-tendering for Price Bid submission through SBI approved Service Provider shall be open to the bidders qualified by the SBI as per Technical Bid Evaluation and Eligibility criteria mentioned herein above.
 - III. The Price-Bid shall be made available online by the Service Provider wherein the contractors will be required to fill-in their Item-wise rates for each item .
 - IV. The Contractors are advised not to wait till the last minute to submit their online item-wise quote in the price bid to avoid complications related with internet connectivity, network problems, system crash down, power failure, etc.
 - V. **It is mandatory to all the bidders participating in the price bid to quote their rates for each and every item.**
 - VI. **In case, contractor fails to quote their rates for any one or more tender items, their tender shall be treated as "Incomplete Tender" and shall be Liable for rejection.**
1. LOG IN NAME & PASSWORD: Each Bidder is assigned a Unique User Name & Password by M/s. Antares Systems Limited, Bengaluru. The Bidders are requested to change the password after the receipt of initial Password from M/s. Antares Systems Limited, Bengaluru. All bids made from the Login ID given to the bidder will be deemed to have been made by the bidder.
 2. BIDS PLACED BY BIDDER: Bids will be taken as an offer to execute the work as specified. Bids once made, cannot be cancelled / withdrawn and the Bidder shall be bound to execute the work at the quoted bid price.
 3. At the end of the E-tendering, SBI will decide upon the winner. SBI decision on award of Contract shall be final and binding on all the Bidders.
 4. SBI shall be at liberty to cancel the E-tendering process/ tender at and time, before ordering, without assigning any reason.
 5. SBI shall not have any liability to bidders for any interruption or delay in access to the site irrespective of the cause.
 6. Other terms and conditions shall be as per your techno-commercial offers and other correspondences till date .
 7. **OTHER TERMS & CONDITIONS:**
 - a. The Bidder shall not involve himself or any of his representatives in Price manipulation of any kind directly or indirectly by communicating with other suppliers / bidders.
 - b. The Bidder shall not divulge either his Bids or any other exclusive details of SBI to any other party.
 - c. Firm can visit the website (<https://www.tenderwizard.com/SBIETENDER>) for submission of online tenders. For any website related queries **M/s. Antares Systems Limited may be contacted.**
 - d. **M/s. Antares Systems Limited, Registered Office: #24, Sudha Complex, 3rd Stage, 4th Block, Bangalore – 560079, Karnataka.**

Help Desk: 7503347659 / 9044314492/ 9073677150/ 151 / 152 / 9674758506 / 9674758723/26
Contact Persons: (On working days 9 AM to 6 PM)

1. Mr. Abhay kumar Singh Mobile No.: +91 9708966660 e-Mail: abhaykumar@antaressystems.com
2. Mr. Pravesh Mobile No.: +91 9044314492 e-Mail: praveshmani.t@antaressystems.com

Portal for online Tendering- <https://www.tenderwizard.com/SBIETENDER>

(ON VENDORS LETTER HEAD)
Application Form

Annexure - 'A'

The Deputy General Manager (B&O)
State Bank of India
Administrative Office Mohali
Corporate Plot No. 89, Sector -68 ,
Mohali (Punjab)-160062

Dear Sir,

e-TENDER FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF CCTV SYSTEM & THEIR MAINTENANCE (INCLUDING MAINTENANCE OF EXISTING CCTV SYSTEM) AT BRANCHES / OFFICES / CELLS OF STATE BANK OF INDIA, ADMINISTRATIVE OFFICE, MOHALI, PUNJAB.

- 1 With reference to your Tender Number **SBI/AO-MOHALI/CCTV/2024/02 DATED 31.05.2024** uploaded online, we hereby submit our application along with all attachments as mentioned in the NIT, duly signed by hand with seal by the Authorised signatory of the firm as acknowledgment of accepting the laid down terms and conditions for supply, installation & annual maintenance of above said work in the Branches / Offices/Cells under administrative control of Administrative Office, MOHALI PUNJAB. We acknowledge to understand and abide by the standard tender process as below:
- 2 The tender should be quoted & submitted as per application format and terms & conditions, copy of which is enclosed herewith as **Annexure-'A'** to **Annexure -"G"** . The L-1 rates will be decided on the basis of tender on the basis of overall total of rates of the items and Annual Maintenance Contract (AMC) draft format of which is attached as **Annexure "P"**
- 3 The tender which is not accompanied by the EMD in required form shall be called "Non Bonafide Tender". The same shall not be considered for acceptance. No interest will be paid on the EMD. EMD of unsuccessful tenderers will be refunded within 30 days of award of Contract and bidder to collect the same from Administrative Office, Mohali Punjab on any working day through their authorised representative. EMD of successful tenderer will be retained as a part of security deposit.
- 4 Any deviation in the above procedures for submission of tender may attract disqualification of the vendor from the tendering process. Conditional tenders will not be considered and will be rejected outrightly. We had studied the Tender Documents thoroughly. Submission of Tender shall be deemed to have been submitted after careful study & examination of Tender Document with full understanding of its implications. Tender without valid signatures by hand & stamp will be rejected.
- 5 In case the day of opening is declared a holiday, the tender will be opened on the next working day at the same time. The Bank does not bind itself to accept the lowest tender and reserves its right to split or reject any or all offers without assigning any reason, whatsoever. Non-participation of empanelled vendors in the tender process may attract disqualification / de-panelement from Bank's panel.
- 6 We understand and undertake that mere submission of application does not guarantee us tender and Bank's decision in this regard will be final and binding on us.
- 7 The e-tender will be called for a minimum period of **one year** which will be **renewed each year upto two times upon sole discretions of the Bank** on satisfactory services. The Bank does not oblige itself to accept the lowest tender and reserves the right to split or reject any or all the offer without assigning any reason thereof.
- 8 L-1 rates will be decided on the basis of total rates of commodities on e-tender basis and if more than one firm becomes L-1 then L-1 will be decided through Lottery System.

Your faithfully,

--Sign & Stamp----- (Name of Authorised Signatory)

M/S _____

Encl: - As above

The Deputy General Manager (B&O)
State Bank of India
Administrative Office Mohali
Corporate Plot No. 89, Sector – 68,
Mohali (Punjab)-160062
Dear Sir,

EARNEST MONEY DEPOSITED DETAILS.

With reference to the above, we herewith deposit the Earnest Money Deposit (EMD) The details of which are as under: -					
Sr. No.	Amount (in Rs.)	(Demand Draft No.)	Date	Name of Drawer Bank	Payable at

Your faithfully,

--Sign & Stamp----- (Name of Authorised Signatory)

M/S _____

Encl: - As above

STANDARD SERVICE LEVEL AGREEMENT FOR SUPPLY, INSTALLATION AND ANNUAL MAINTENANCE CONTRACT (AMC) OF CCTV SYSTEM IN THE BRANCHES/OFFICES UNDER ADMINISTRATIVE CONTROL OF STATE BANK OF INDIA ADMINISTRATIVE OFFICE, MOHALI PUNJAB.

MADE THIS _____ the DAY OF _____ BY AND BETWEEN STATE BANK OF INDIA, a body corporate constituted under the SBI Act 1955 and having one of its Local Head Office at Chandigarh and an Administrative office at MOHALI PUNJAB (hereinafter referred to as 'The Bank' which expression shall include its successor and assigns) duly represented by Shri..... Chief Manager (Security)Administrative office, MOHALI, PUNJAB

AND

M/s. ABC (**selected Vendor Firm Name**) having its registered Office at **Full address of Vendor** (hereinafter referred to as VENDOR which expression shall include its successors and assigns) represented by Shri....., designation.....

WHEREAS the Bank has issued tender inviting proposals from the empaneled vendors for supply, installation and annual maintenance (AMC) of Close Circuit Television System (Equipment) installed in its branches and offices more fully described in the said tender & vendor has participated in the above tender process and was selected for supply, installation & maintenance services (AMC) for complete CCTV System along with its accessories as defined in scope of work for different makes installed at the branches/ offices of the Bank under Administrative Office, MOHALI PUNJAB.

WHEREAS the vendor has agreed to provide above mentioned services for CCTV systems at different branches/ offices of the Bank.

NOW THEREFORE, in consideration of the mutual covenants, undertaking and conditions set forth below and for other valid consideration the acceptability and sufficiency of which are hereby acknowledged the Parties hereby agreed as follows:

2. DEFINITIONS: Certain terms used in this Agreement are defined hereunder. Other terms used in this unless otherwise specifically defined, those terms, acronyms and phrases in this Agreement that are utilized in the information technology services industry or other pertinent business context shall be interpreted in accordance with their generally understood meaning in such industry or business context, unless the context otherwise requires/mentions, the following definitions shall apply:

2.1.1 'The Bank' shall mean the State Bank of India (including its branches and its offices

2.1.2 "Confidential Information" shall have the meaning set forth in Clause 18.

2.1.3 "Deficiencies" shall mean unsatisfactory outcome of the Services which has resulted in deviation from the desired outcome and has thereby cause loss to a party of this Agreement.

2.1.4 "Documentation" 'Documentation' includes, user manuals, installation manuals, operation manuals, design documents, process documents, technical manuals, functional specification, software requirement specification, on-line tutorials/ system configuration documents, system/database administrative documents, debugging/ diagnostics documents, test procedures, Review Records/ Test Bug Reports/ Root Cause Analysis Report, list of all Product components, list of all dependent/external modules and list of all documents relating to traceability of the Product as and when applicable etc.

2.1.5 “Intellectual Property Rights” shall mean, , any and all: (a) rights associated with works of authorship, including copyrights & moral rights; (b) Trade Marks; (c) trade secret rights; (d) patents, designs, algorithms and other industrial property rights; (e) other intellectual and industrial property rights of every kind and nature, however designated, whether arising by operation of law, contract, license or otherwise; and (f) registrations, initial applications, renewals, extensions, continuations, divisions or reissues thereof now or hereafter in force (including any rights in any of the foregoing).

2.1.6 “AMC Charges” means the price payable to the Vendor under the Agreement. The obligations expressed under the AMC shall include all costs relating to labour, spares, maintenance (preventive, unscheduled), and transport charges from site to manufacturer’s works and back for repair/adjustment; or replacement at site of any part of the equipment which under the normal and proper use and maintenance proves defective in design, material or workmanship or fails to conform to the specifications given by the purchaser to VENDOR.

2.1.7 “Root Cause Analysis Report” shall mean a report addressing a problem or non-conformance, in order to get to the ‘root cause’ of the problem, which thereby assists in correcting or eliminating the cause, and prevent the problem from recurring.

2.1.8 ‘Services’ shall mean and include the Services offered by Vendor including but not limited to Comprehensive Annual Maintenance Contract under this Agreement.

Services’ shall also include the Implementation Services, Training Services and Maintenance Services etc. and other incidental services and other obligation of the service provider shall be provided under this Agreement

3. **COMMENCEMENT & TERM OF AGREEMENT:**

3.1. This agreement shall be valid for the period of ONE YEAR from to subject to satisfactory performance. The same may be terminated at any time, in terms of clause 19 of this Agreement. The agreement may be renewed at the sole discretion of the Bank subject to review of performance of the vendor by the Bank.

3.2. Unless terminated earlier in accordance with this Agreement, the Agreement shall come to an end on completion of the term specified in the Agreement or on expiration of the renewed term as the case may be.

4. **SCOPE OF WORK:**

4.1. **General Instructions for Supply, Installation & Commissioning of New**

Equipment’s:-

4.1.1 IP based CCTV system shall be installed for new installation of complete system as per minimum technical specifications enclosed as **Annexure G A-1 to G A-8**. Partial replacement / repair of the existing Analog CCTV system may be provided HD analog system equipments as per approved minimum technical specifications.

4.1.2 The vendor shall commence the work on getting supply order/ letter of award from the concerned Branch/ Office.

4.1.3 Entire work shall be completed within Two (2) weeks from 10th day of issue of letter of award for complete new CCTV system installation.

4.1.4 On completion of Supply & Installation work the vendor is required to get Installation Certificate signed from the Branch Manager/ Bank’s authorised officer as per **Annexure-'D'**.

4.1.5 It is mandatory to have every Branch, Office, other premises & establishments to be covered under functional CCTV surveillance round the clock.

4.1.6 Vital areas to be covered under CCTV coverage are:

i. Cash Safe. ii. Gold Safe. iii. All Bins of Chest Vault. (Should include all cash operations in the vaults, other cash handling areas of the Chest to identify any mischief / irregularity / pilferage)

iv. Peripheral area surrounding the Chest premises

v. Entry and exit of Cash Safe Room / Strong Room.

vi. Cash remittance loading / unloading area.

vii. Cash shroffing area & all cash handling points and cash movement area/ all Frisking areas.

viii. Patrolling corridor around Strong Room.

ix. All SWO Counters (in a way to cover SWO's area of operation, faces & activities of customers at counter & passage behind the cash counters (if any) x. Entry to locker room. xi. Cheque drop box. xii. Burglar Alarm control panel & CCTV DVR xiii. All entry / exits of the branch. (Primary as well as secondary) xiv. Area immediately outside the entry / exits of the branch. xv. Customer Area xvi. BM's Cabin (preferably by concealed camera) xvii. System/ Server Room / UPS room / Battery Room.

xviii. Record Room & Stationery Room xix. Onsite ATM Kiosk attached to Branch. (Both Inside & Outside) xx. Entrance to Canteen / Pantry.

xxi. Bank's Parking Area xxii. Isolated areas behind and adjacent to the Branch building.

xxiii. Any other vulnerable area observed by the BM / concerned Security Officer xxiv. All outdoor cameras should be weather proof.

4.1.7 All the cameras should be night vision cameras.

4.1.8 The live footage should be monitored with the help of a screen by the BM.

4.1.9 CCTV System should be provided only UPS power supply.

4.1.10 Minimum 90 days of recording at minimum 25 frame per second (FPS) of each camera @ 1048 Bit rate should be kept in the DVR/NVR all the time.

4.1.11 DVR/ NVR should be kept away from the public eye under lock & key and be protected against mishandling/ damaging.

4.1.12 AMC vendor's name and contact details should be mentioned on the DVR/NVR/Monitor.

4.1.13 Data cable for CCTV can be taken into the currency chest area by drilling holes in the wall or through any other available provision.

4.1.14 Currency Chests should have independent CCTV System covering all the Bins of the Chest vault. Monitor of this system should be available with Cash Officer along-with the Branch head for real time viewing. The Monitor should be so placed that it can be monitored by Bank Guard during non-business hours or an additional monitor may be provided for the same. Currency Chest Branches should have minimum two DVR/NVR system. One covering the Currency Chest and the other one covering the rest of the Branch. Additional systems may be considered if the area is large enough for surveillance. One camera at all the times must cover Frisking operation near the Chest /all cash handling/shroffing areas.

4.1.15 In the event of any incident, the CCTV DVR/ NVR should immediately be secured and a qualified technician of the empanelled vendor, should retrieve the footage in removable storage device and it should be kept in the safe custody of the BM.

4.1.16 Password of DVR / NVR should not be shared with anyone. It should remain with BM or designated official only

4.1.17 Cat-6 normal cable should be used for wiring inside the building and Cat-6 armoured to cover area outside the building (Parking & peripheral area etc).

4.2 For Warranty & Annual Maintenance Contract (AMC) period:-

During the period of agreement / contract the vendor shall:-

4.2.1 Maintain CCTV SYSTEM installed in the Branches / Offices under the Administrative Office, MOHALI PUNJAB in good working order and for this purpose shall provide the maintenance service.

4.2.2. The CCTV Systems (old & new both) will be maintained under the Annual Maintenance Contract. Newly installed system shall be covered under AMC after completion of one year warranty period. AMC will be comprehensive in nature. The AMC charges will include all types of repairs and replacements except items

damaged/destroyed/burnt due to fire, flood, electric fluctuation, or any willful damage. For the sake of clarity, AMC will cover all existing CCTV Systems and newly installed CCTV systems on completion of one year warranty period. In cases where unserviceable parts of the EQUIPMENT need replacement VENDOR shall replace all such parts, at no extra cost of Bank with brand new parts or those equivalent to new parts in performance. However, keeping in view 5 years life span, equipments having installation life of more than 5 years may be replaced on chargeable basis with prior approval of the bank as per approved rates. The complete system or parts thereof may be replaced earlier than its life, if it degrades in required quality or is unable to meet the minimum requirements of the Branch / Office only on specific recommendation of concerned Security Officer and approval of respective Controller.

4.2.3 Check the cameras & their lenses for their serviceability. Check picture quality for each of the camera.

4.2.4 Thorough check up, testing, servicing cleaning, inspection, & maintenance etc. of complete CCTV systems and its accessories like DVR/NVR system, Cameras, UPS, BNC Connectors etc. Check picture quality of all IR cameras during night recording.

4.2.5. Check availability of 90 days recording for all cameras in motion-detection mode/180 days recording for the Lockers entry point camera.

4.2.6 Check whether the CCTV is being kept switched ON 24X7 and appraise the Branch Manager/ Concerned Officer, if found otherwise. Ensure that all the CCTV systems/cameras are functional at all the times in Currency Chest branches to avoid penalties during RBI audits.

4.2.7 Switch off the regular power supply and check the working of CCTV system on UPS/Battery back-up.

4.2.8 To train bank staff on operations of the CCTV system including special features, data retrieval, copy it on pen drive, making of CD, troubleshooting & routine maintenance of CCTV.

4.2.9 To rectify the equipment and replace worn out or defective parts of system.

4.2.10 Retrieval of CCTV footage as and when required / or called by the Bank.

4.2.11 Maintain/ update record of CCTV in the Security Information Register.

4.2.12 In case the DVR or the cameras requires major repairs, the vendor shall provide a replacement before taking the defective equipment for repairs so that the branch / Offices remain under CCTV cover all the time.

4.2.13. There must be a gap of minimum 70 days between two mandatory quarterly visits. 4.2.14 Timely & effective performance of the contractual obligation shall be considered as the essence of the contract and the Vendor hereby agree to maintain necessary Equipment, sub/ assemblies, kits of parts, components, spare parts and other related accessories of CCTV system in fully functional state and as per needs of "the Bank", for entire period of AMC to enable it to fulfil its obligations.

4.2.15 All repair and maintenance service described herein shall be performed by qualified maintenance engineers totally familiar with the EQUIPMENT.

4.2.16 On completion of corrective maintenance, the technician should prepare a maintenance report. A log/register (Security Information Register) shall be maintained at the branches / offices to record each incident of EQUIPMENT malfunction, errors, faults, failures, defects, etc, indicating the date and time at which VENDOR got informed or / notice the malfunction, errors, faults, failures, defects, etc, and the date and time of commencement and successful completion of repair work and nature of repair work performed on the EQUIPMENT together with a description of the nature of work, either by description of the malfunction, errors faults, failures, defects, etc., or as discovered, and repaired during regular scheduled preventive maintenance.

4.2.17 If the Bank desires to shift the EQUIPMENT to a new site and install it there at urgently, the VENDOR shall be informed of the same. VENDOR shall arrange to do so. The terms and conditions of this agreement, after such shifting and re-installation, would continue to be binding on VENDOR and the Bank. Shifting charges of the CCTV system shall be as per approved rates.

4.2.18 The entries in the register/certificate under the initials of an authorized representative shall constitute conclusive proof of the malfunction, errors, faults, failures, defects and repairs etc. On AMC visit and maintenance vendor is required to get Service Certificate signed by the Branch Manager/ Bank's authorised officer as per **Annexure-'E'**.

4.2.19 During the term of this Agreement, VENDOR agrees to maintain the Equipment in good working order and for this purpose will provide the following type of repair and maintenance services:

4.2.20 **Preventative maintenance:** Planned maintenance of a system, carried out on a scheduled basis.

4.2.21 **Corrective maintenance:** Emergency maintenance of a system, or part thereof, carried out in response to the development of a fault.

4.2.22 **User maintenance:** Provide Basic hands on training/ maintenance tasks/ fault reporting mechanism to be carried out by the Branch Manager and / or authorized person.

5. **PREVENTIVE MAINTENANCE:**

5.1 VENDOR shall conduct preventive maintenance including but not limited to inspection, testing, satisfactory execution of diagnostics, replacement of unserviceable parts, cleaning and removal of dust and dirt from the interior of the EQUIPMENT and necessary repairing of the EQUIPMENT once in a quarter during the Annual Maintenance Contract (AMC) year.

5.2 Notwithstanding the foregoing, VENDOR recognizes Banks operational needs and agrees that SBI shall have the right to require VENDOR to adjourn preventive maintenance from any scheduled time to a date and time, as decided by the Bank/ respective Module Security Officer / Branch Manager.

5.3 The vendor will have to mandatorily provide 04 quarterly branch visits and any number of on-call/ emergency visits without any charge.

6. **CORRECTIVE MAINTENANCE**

6.1 VENDOR shall correct any faults and failures in the CCTV system and shall repair and replace worn or defective parts of the EQUIPMENT immediately.

6.2 VENDOR in effecting any such replacement shall not remove the equipment or any part or parts thereof until VENDOR is ready to move in substitute equipment or part or parts to replace it. If the replaced part or parts are not identical in all respects to the part replaced, VENDOR shall inform Bank in writing at the time of such replacement. Bank in such case have the right to request VENDOR to replace the parts with the original compatible parts only and VENDOR shall comply with such request forthwith.

6.3 The vendor will have to arrange any number of on-call/ emergency visits without any charge on registering the complaint by the bank even if preventive visits was done during the quarter.

7. **USER MAINTENANCE:** It is important that the user is aware of the importance to provide user maintenance to the CCTV System. The AMC Vendor shall offer in-depth training to the branch staff on the offered solution according to the following:

7.1 Provide hands on training to the branch staff.

7.2 Train bank staff on operations of the system including special features, data retrieval, copy it on pen drive, making of CD, troubleshooting & routine maintenance of CCTV

7.3 The training shall be conducted by the vendor within the branch / office premises.

7.4 Educate the staff about the reporting channels of faults, as soon as possible after they are discovered, and that details are entered in a fault reporting book.

8. **SPARE PARTS AND TEST EQUIPMENT:**

8.1 VENDOR shall further ensure that the EQUIPMENT is not down at any time for want of spare parts.

8.2 VENDOR shall repair / replace the defective EQUIPMENT with STANDBY EQUIPMENT within the timelines given in the table below, and restore operation. VENDOR will be required to pay penalty as per Para 11.3 if repair works/ replacement of defective equipment does not take place within the stipulated period as per Para 16

8.3 **RESPONSE TIME:** VENDOR shall provide repair and maintenance service, in response to complaints sent through email, SMS, written notice, within stipulated response time.

9. **PERFORMANCE EXPECTED:**

9.1 VENDOR shall guarantee and ensure SYSTEM UPTIME efficiency of 100% for the full configuration of the EQUIPMENT, in every quarter. SYSTEM UPTIME for the purposes of this document is defined as productive and error- free time of the EQUIPMENT reckoned on a quarterly basis and the SYSTEM UPTIME efficiency shall be computed as under:

$$\frac{(\text{Total Time} - \text{Down Time}) \times 100}{\text{Total Time}}$$

Total Time

9.2 Where: TOTAL TIME is the time (no. of hours) for which the EQUIPMENT is required to be satisfactorily operational at the SITE during the quarter. (90/91/92X24)

9.3 DOWN TIME is the aggregate time lost due to EQUIPMENT mal-function, unsatisfactory operation and improper maintenance during the quarter.

10. **PENALTY:** Without prejudice to any of BANK's other rights and remedies, for every 1 % drop in System uptime from the guaranteed 100% during a quarter, VENDOR shall reimburse to the Bank towards penalty, 1% of value of the AMC contract amount, which will keep increasing as per para10.3 limited to 20%, this will be recovered from the AMC charges payable / Retention Money Deposit held by the Bank and the same will also otherwise recoverable from the Vendor. Availability will be calculated on a quarterly basis

10.1 In the event of deficiency being such that the 25% penalty ceiling is breached, the vendor shall become liable for further penal actions to the extent of termination of his contract with forfeiture of EMD/RMD as deemed fit and reasonable by the Bank.

10.2 **However**, this penalty shall also not apply in case of delays in restoration of system caused by so called acts of God, War, Earthquake, Tsunamis, Riots, Bandhs, Civil

Disturbances, any of which affect either the vendor's nearest service center or the site of installation.

10.3 Appropriate Penalties will be recovered from the quarterly payment if the Vendor is not able to achieve required Service levels as mentioned below:

S.No	SLA	Target Penalties
(i)	Availability/Uptime of CCTV System consisting of CCTV camera/ DVR/ Display panel 100.00%	100.00% = NIL 99.00% to 98.99% =1% of AMC Amount 98.00% to 98.99%=2 % 97.00% to 97.99%=3 % 96.00 to 96.99% =4 % 95.00 to 95.99% = 6 % Less than 95% = 20 %
(ii)	Poor of pictures quality or Face Recognition System	Rs. 1000/- per instance
(iii)	Adequate number of days recording not available	Rs. 100/- for each day < 90
(iv)	Complaint resolution	Within time limit as per RFP -Nil Delay of each day in complaint resolution – Rs. 100/- / day
(v)	Not carrying out AMC as per schedule	Rs. 500/- for every week of delay
(vi)	Penalty, once the maximum penalty reached.	Bank may terminate the contract and Forfeit the EMD.
(vii)	Not keeping required Manpower as per SLA	Rs. 1000/- per technician, at every instance

11. The VENDOR, if he chooses, may install his own standby system of identical specification, if such systems are acceptable to Bank. The period of use of such systems shall be deducted from downtime for all purposes.

12. **PERFORMANCE GUARANTEE AND PENALTIES**

12.1 The vendor has to furnish a performance guarantee in the form of bank Guarantee for an amount equals to 3% of the contract value from a Scheduled Commercial Bank which has been calculated around Rs 25,000/- other than State Bank of India in a format provided/ approved by the Bank.

12.2 The performance guarantee is required to protect the interest of the Bank against delay in repair/ maintenance and or poor quality of the material or poor performance of services provided, which may warrant invoking of performance guarantee. In case any act of the Vendor results in imposition of liquidated damages then also the Bank reserves the right to invoke the performance guarantee.

12.3 If at any time during performance of the contract, if the Vendor shall encounter unexpected conditions impeding timely completion of the services under the Agreement and performance of the services, the Vendor shall promptly notify the Bank in writing of the fact of the delay, it's likely duration and its cause(s), as soon as practicable.

12.4 **13. PAYMENT OF BILLS/CHARGES:** The Bank will pay properly submitted valid invoices within reasonable period. All payments shall be made as under: -

13.1 In Case of New Supply and Installation of CCTV system : In case of new supply and Installation of CCTV system or its equipment (s), the vendor will submit an estimate to the branch/office and on

confirmation, will supply & install the equipments. On successful installation, Bill will be submitted as per approved rates along with Installation Certificate signed from the Branch Manager/ concerned officer as per **Annexure-'D'**.

13.2 For all new supply and installation of CCTV system, the bill will be vetted by the Branch manager/ Concerned officer/ Security Officer and shall be paid by the Branch as per Bank's instructions.

13.3 **In case of Maintenance of CCTV system:** On completion of the Maintenance of CCTV system at the branches/offices, the firm will arrange signing of the service/ Maintenance certificate from the Branch Manager/ concerned officer as per format attached at **Annexure "B-VIII"**. The firm will submit quarterly bill of AMC to the RBO for the Branches/ Offices and to Branch manager for direct Branches along with the copy of Service/ Maintenance Certificates. Bills of AMC shall be paid by the concerned RBO/ Direct Branches quarterly.

13.4 **Rates/ charges:** Rates/ charges for supply, installation, and AMC of various equipments of the CCTV system shall be as finalized on completion of tender process and same will be annexed.

13.5 The rates above are excluding GST. GST to be paid as actual. All duties and taxes (excluding GST), if any, which may be levied, shall be borne by the Vendor and Bank shall not be liable for the same.

13.6 Vendors to get the Service/ Maintenance Certificate signed by the respective Branch Manager/ authorized official at the time of visit.

13.7 Payment for retrieval of CCTV footage and copying it on CD/ DVD/ Pen drive will be paid extra (to be decided through bidding process).

13.8 Expenses, stamp duty and other charges/ expenses in connection with execution of this Agreement shall be borne by vendor.

13.9 No advance payment will be made.

13.10 The Bank may withhold payment of bills, for deficiency in service or otherwise, and may set-off penalty amount and any other amount which Vendor owes to the Bank against charges payable to vendor under this Agreement.

14. RESPONSE TIME FOR REPAIRS & MAINTENANCE: Time frame for a complaint to be attended till it is resolved is as under:

S.No	Branch/ Office Location	Max Time Limit
1.	Metro/ Urban	24 hrs
2.	Semi Urban	36 hrs
3.	Rural	48

15. AMC VISIT REPORTS:

15.1 AMC Vendor shall prepare Three copies of the visit report (as per **Annexure-E**) and each report will be counter signed by the Branch Manager/ authorized official.

15.2 One copy will be handed over to the Branch Manager.

15.3 Second copy to be retained by the vendor.

15.4 Third copy to be sent to the Security Officer at the Administrative/Regional Office.

15.5 Necessary entries along with dates should be made in the Security information register, and duly signed by the representative of the vendor and the Branch Manager/ authorized Official

16. SUBCONTRACTING: Vendor will not subcontract or permit anyone other than vendor's qualified personnel to perform any of the work, services or other performance required of vendor under this agreement without the prior written consent of the Bank.

17. **SECURITY:** VENDOR agrees that it and its personnel will at all times comply with all security regulations in effect from time to time at the Bank's premises and externally for materials belonging to the Bank.
18. **CONFIDENTIALITY:** Vendor acknowledges that all material and information which has or will come into its possession or knowledge in connection with this agreement or in performance hereof, consists of confidential and proprietary data, whose disclosure to or use by third parties will be damaging or cause loss to the bank. Vendor agrees to hold such material and information in strictest confidence, not to make use thereof other than for the performance of this agreement to release it only to vendor's employees requiring such information, and not to release or disclose it to any third party. Vendor agrees to take appropriate steps/ action with respect to its employees to ensure that the obligations of nonuse and non-disclosure of confidential information under this agreement are fully satisfied.
19. **TERMINATION:**
- 19.1 This agreement shall be terminated by efflux of time or earlier by the Bank by serving 30 days' notice in writing in case the services of the VENDOR is found unsatisfactory or not in accordance with the agreement or there is any breach of the terms and conditions of this agreement on the part of the Vendor or for convenience.
- 19.2 The Vendor goes bankrupt and becomes insolvent.
- 19.3 If during the currency of the agreement, any statute, rules/ govt. notification prohibits the services envisaged under this agreement or otherwise the contract shall come to an end forthwith and no compensation shall be payable to the Vendor.
20. **LIABILITY AND INDEMNITIES:**
- 20.1 VENDOR represents and warrants that the repair and maintenance service to be provided do not violate or infringe upon any patent, copyright, trade secret, or other proprietary right of any other person or other entity. VENDOR agrees that it will, and hereby does, indemnify the Bank from any claim, damages, loss, penalty etc., directly or indirectly resulting from or arising out of any breach or claimed breach of this warranty.
- 20.2 Vendor agrees and hereby keeps the Bank indemnified against all claims, actions, loss, damages, reputation loss, costs, expenses, charges, including legal expenses (Attorney, Advocates fees included) which the Bank may suffer or incur on account of any deficiency in Services rendered by the Vendor or breach of any obligations mentioned in clauses hereinabove, including without limitation, breach of confidentiality obligations or any acts of commission / omission on the part of its employees, agents, representatives or Sub-Contractors of the Vendor. The Vendor agrees to make good the loss suffered by the Bank on first demand made by the Bank in this regard which shall be final conclusive and binding on the Vendor.
- 20.3 Vendor further undertakes to promptly notify the Bank in writing any breach of obligation of the Agreement by its employees or representatives including confidentiality obligation and in such an event, the Bank will in addition to and without prejudice to any other available remedies be entitled to immediate equitable relief in a Court of competent jurisdiction to protect its interest including injunctive relief.
- 20.4 The Vendor shall indemnify and keep fully and effectively indemnified the Bank against any fine or penalty levied on the Bank for improper payment of tax for the reasons attributable to the Vendor.

20.5 The Vendor hereby undertakes the responsibility to take all possible measures, at no additional cost, to avoid or rectify any issues which thereby results in non-performance of software/ hardware/ deliverables within reasonable time. The Bank shall report as far as possible all material defects to the Vendor without undue delay. The Vendor also undertakes to co-operate with other service providers thereby ensuring expected performance covered under scope of work.

20.6 Nothing contained in this Agreement shall impair the Bank's right to claim damages without any limitation for an amount equal to the loss suffered for non-performance of software

21. COMPLIANCES OF STATUTORY / REGULATORY PROVISIONS:

21.1 The Vendor shall be responsible for compliance of all related laws rules/ regulations and Government instruction from time to time that are applicable for the service to be provided by it during the currency of this agreement.

22. GENERAL:

22.1 No amendment to this Agreement shall be effective unless it is in writing and signed by duly authorized representatives of both parties.

22.2 Each party warrants and guarantees that it has full power and authority to enter into and perform this Agreement and the person signing this Agreement on behalf of each has been properly authorized and empowered to enter into this Agreement. Each party further acknowledges that it has read this Agreement, understands it, and agrees to be bound by it.

22.3 Words importing the singular include the plural and vice versa.

23. JURISDICTION:

All dispute arising out of or connected with this contract shall be instituted in the Court of competent jurisdiction situated in Chandigarh/ MOHALI PUNJAB.

24. SAVING CLAUSE:

No suits, prosecution or any legal proceedings shall lie against the State Bank of India or any employee of the Bank for anything that is done in good faith or intended to be done in pursuance of this agreement.

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED THIS AGREEMENT ON THE ABOVE-MENTIONED DATE.

Seal of VENDOR affixed in presence of Shri _____ (VENDOR's authorized representative) and signed by the duly authorized representative, Shri _____ Designation _____.

In the presence of

(1) Shri _____ Designation _____ Signature _____

(2) Shri _____ Designation _____ Signature _____

The Bank by its representative:

Shri _____ Designation _____ Signature _____

State Bank of India, Administrative Office, MOHALI PUNJAB _____

ANNEXURE 'D'

**INSTALLATION CERTIFICATE
(Applicable for New Installation)**

Date :

It is to certify that the CCTV System has been installed at(Name of the branch) on, in accordance with work order of(Branch/ Office) received vide their letter No/ Mail.....dated and the system is working satisfactorily. All the items as per Installation certificate/invoice No..... dated.....have been installed at the branch and have been physically verified by Shri(Branch Manager/ Authorise official of the Branch).

2. It is further certified that working of the CCTV System has been explained to the following staff members by Shri....., authorised representative of M/S.....

Sr. No.	Name	Designation	Signature
I			
li			
lii			
Iv			
V			

Signature
(Name)
Authorised Representaive
M/S

Signature
(Name)
Branch Manager
(Branch Seal)

SERVICE CERTIFICATE
(Applicable for Service/ Maintenance)
Date _____

It is to certify that the CCTV System installed at(Name of the branch) has been checked by Shri, authorised representative of M/S on (date), in accordance with agreement of Administrative Office, MOHALI PUNJAB and the system is working satisfactorily. Previous recordings of (No of days) w.e.f.(date) to(date of checking) are available in the CCTV System.

2. It is further certified that working of the CCTV System has been explained to the following staff members:-

Sr. No.	Name	Designation	Signature
I			
li			
lii			
lv			
v			

Signature
(Name)
Authorised Representaive
M/S

Signature
(Name)
Branch Manager
(Branch Seal)

UNDERTAKINGS

We undertake: -

(a) That we will carry out the maintenance/service/repair work of Bank's existing security alarm systems (of any make) & supply/installation of new security alarm systems (of approved make) in the branches /offices of State Bank of India under the administrative Control of Administrative Office Mohali including the branches/offices of Bank located in the geographical area of Administrative Office Mohali at the rates and terms & conditions of the tender.

(b) That we will carry out the work at all allotted centers/branches/offices under the Administrative Office, Mohali and will place our technicians/representative locally at / in Mohali, Hoshiarpur, Patiala, Pathankot and Ropar, at our service entre, so as to be able to attend to the calls from branches/offices for maintenance/service/repair & new supply/installation etc. promptly. We will also continue to keep activated our e-mail ID for receiving the complaints from branches/offices. We also undertake that we will receive the complaints from branches/offices from 9:30 AM to 5:30 PM telephonically on all Banks working days. We also undertake that due record of each complaint lodged by branches/offices of Bank will be maintained by us and complaint/docket number will be given to complainant.

(C) That our firm / company or any of its Director(s) / Proprietor(s) has not been blacklisted by an office of the PSU and Private Banks or any Government Body and there is no vigilance, or any criminal or other inquiry pending or contemplated against any person(s) of the firm or any of its Owner/Partner/Director of the Firm/Company.

Place:
Date:

Authorised Signatory of the Firm
with Seal

“MINIMUM TECHNICAL SPECIFICATION”**TECHNICAL SPECIFICATION CLOSE CIRCUIT TELEVISION (CCTV) SYSTEM**

S.No	Item	MAKE & MODEL APPROVED
(a)	XVR/NVR	MAKE & MODEL APPROVED
	(i) AI based HD (For HD & IP) 16Ch with 8 SATA XVR	Dahua /DH-XVR5816S-I3 Hikvision/ DS-8116HQHI-K8 Cp Plus /CP-UVR-1616K8-H
	(ii) AI based HD (For HD & IP) 32ch with 8 SATA XVR	Dahua/ DH-XVR5832S-I3 Hikvision/ DS-8132HQHI-K8 Cp Plus/ CP-UVR-3216K8-H
	4 CH Network Video Recorders(NVR)	Dahua / DHI-NVR4204-4KS2/L Hikvision/ DS-7608NI-K2 Cp Plus/ CP-UNR-4K4082-V2
	8 CH Network Video Recorders(NVR)	Dahua / DHI-NVR4416-4KS2/I Hikvision/ DS-7716NI-K4/DS-7708NI-Q4 Cp Plus/ CP-UNR-4K4164-I
	16 CH Network Video Recorders(NVR)	Dahua/ DHI-NVR4816-4KS2/I Hikvision/ DS-8616NI-K8 Cp Plus/ CP-UNR-4K516R8-V2
	32CH Network Video Recorders(NVR)	Dahua/ DHI-NVR4832-4KS2/I Hikvision/ DS-8632NI-K8 Cp Plus/4K532R8-V2
(b)	Camera:	
	(i) 3MP or higher Standalone IP Cam with 256GB SD Card slot with Inbuilt Audio (Fish Eye Camera)	Dahua/DH-IPC-EW5541P-AS Hikvision/ DS-2CD2935FWD-IS Cp Plus/ CP-UNC-EE51L1C-VMD
	(ii) 2Megapixel IP IR Dome Varifocal Camera	Dahua/ DH-IPC-HDBW2231RP-ZAS-S2 Hikvision/ DS-2CD3721G0-IZS Cp Plus/ CP-UNC-VC21ZL4-VMDS
	(iii) 2Megapixel IP IR Bullet Varifocal Camera	Dahua/ DH-IPC-HFW2231TP-ZAS-S2 Hikvision/ DS-2CD3621G0-IZS Cp Plus/ CP-UNC-TC21ZL6-VMDS
	(iv) 2Megapixel IP IR Dome fixed lens Camera	Dahua/ DH-IPC- HDBW2231FP-AS-S2 Hikvision/ DS-2CD3121G0-ISF Cp Plus/ CP-UNC-VC21L5-VMDS
	(v) 2 Megapixel HD IR fixed lens IP Bullet Camera	Dahua/ DH-IPC-HFW2241T-AS Cp Plus/CP-UNC-TC21L5C-VMDS
	(vi) 2Megapixel IP IR Dome fixed lens Camera with inbuilt Micro SD/SDHC/SDXC card slot for min 256 GB with 24*7 Colour image	Dahua/ DH-IPC-HDW2231TP-AS-S2 Hikvision/ DS-2CD3321G0-IUF Cp Plus/ CP-UNC-DB21L3C-MDS
(c)	Other Components:	
	(i) Hard Disk	Seagate SKYHAWK / WD Purple Video Surveillance Series
	(ii) Monitor (Surveillance grade)	Samsung/ Dell/ LG/Acer/Equivalent
	(iii) Cable Video	Finolex/Polycab/ Polycab or equivalent
	(iv) Electrical Wire	ISI Marked

(v)PVC & Conduit	ISI Marked
(vi)6U Rack	D Link/ Equivalent
(vii)SD Card	Sandisk / Hikvision/Honeywell
(viii)Network Switches	D Link /TPLINK / CISCO or equivalent

Annexure-‘G’-A1’

XVR for (HD & IP Cameras) FOR 16 & 32CHANNELS

S. No	Parameter	Specification
1.	Compatibility	Pentabrid Support (Analog cameras (mandatory), AHD, CVI, TVI (minimum one out of the three other than itself) and IP(On vif) video output, tamper proof.
2.	Compression Method	H.265+ to Achieve Max recording days
3.	System Resources	Pentaplexfunction:recording,playback,liveview,backup,remoteaccessover IP network
4.	Recorder Control Options	Video Front panel, IR Based remote control, Keyboard(both RS232c and IP), IP network ,USB/wireless mouse
5.	Analog/HD Camera Input	Minimum 16 Video Channel, BNC interface,
6.	IP Camera Input	2MP,1080P;IP Camera of upto 6MP support (Min2channel max can be 24 (Disabling 16 HD Ports for 6ch) and 40IPC by disabling 32ch HD port of 32ch DVR
7.	Recorder Video output	Minimum 1 VGA,1 HDMI, RCA
8.	Recorder Audio Input	Minimum 1 audio channel, BNC or RCA
9.	Recorder Audio output	1 audio channel, BNC or RCA
10.	Recorder Bi directional Talk	1channel Input,BNC,1channel Output, BNC or RCA
11.	Display Screen Mode	1,4,8,9,16,32, ALL (Window)
12.	Camera Scheduling	Supported (continuous/motion/event based)
13.	On Screen Display	Date, Time, Camera Title, Video loss alert, motion detection alert, recording, camera lock alert, camera tampering, camera masking.
14.	Video/Audio Compression	H.265+ /G.711 respectively(One Channel) or higher
15.	Image Resolution	All channel HD, real-time recording @ 25 fps in all channels with selectable fps simultaneously.
16.	Encoding Stream	CIF;2CIF;4CIF;HD1;D1; 1080P or higher, real time recording @ 25 fps in all channels with selectable fps
17.	Video Encoding Bit Rate	Analogvideo:32~2048Kb/s or higher, IPvideo:32~4096Kb/s or higher
18.	Image Quality	6 levels (VBR/CBR)
19.	Recording Mode	Manual, Schedule, Regular, Motion detection, Camera blank, Video loss. Stop Recording.

		FIFO and auto overwrite facility should be there
20.	Recording Priority	Manual; Alarm; Motion Detection & regular
21.	Recording Interval	Prerecord:1secto30sec., Post-record: 10sec ~5 minutes
22.	Alarm Input	16 Input and 4 Output
23.	Functionality	Support multiple VCA events for both analog and IP cameras.
24.	Relay Output	Supportedmaximum2
25.	Water Marking	Supported
26.	Playback Channel	1,2,4,16
27.	Recorded Data Search Mode	Video Time & Date, Exact search(with Date, Hour, Minute and Second accuracy), Motion Detection, Alarm.
28.	Playback Options	Play, Digital zoom (any size), Pause, Rewind, Slow motion, shift to Next file, shift to Previous file, one click Previous camera, one click Next camera, Full screen mode, Replay, Backup selection, Fast forward, Shuffling and masking. Provision for support of the 3rd party cloud storage (Global Standard Cloud support).
29.	Operation Over Network	Monitor, Playback, File download, Log information, System setting,
30.	Hard Drive Storage Option	16& 32Channel- 8 SATA. Should support up to 10TB per SATA port. Channel should have e-SATA interface
31.	USB Interface	Minimum 2 Ports (oneshouldbe3.0)
32.	Serial Interface	1RJ45RS-232 interface; 1RS-485 interface,1RS-485 keyboard interface
33.	Power Supply	AC100~240V,50/60Hz
34.	Working Environment	All Indoor weather conditions
35.	Duplex type	Recorder should be able to playback recorded footage without having to stop recording
36.	Certificate	UL/FCC&CE & BIS
37.	HDD quality	Surveillance (2/4/6/8/10TB)

Annexure- 'G'A2

NVRFOR4/8/16/32CHANNEL

S. No	Parameter	Specification
1.	Compatibility	IP cameras tamper proof.
2.	Compression Technology	H.265+
3.	System Resources	Pentaplex function: recording, playback, live view, backup, remote access over IP network.
4.	Recorder Options	Control Video Front panel, IR Based remote control, Keyboard (Both RS232c and IP), IP Network, USB/wireless mouse
5.	IP Camera Input	Minimum 4/8/16& 32 IP channel/ and each supporting

		upto 8 MP			
7.	Recorder Video Output	Minimum 1 VGA, 1 HDMI			
8.	Recorder Audio Input	Minimum RCA	1	audio	channel
9.	Recorder Audio Output	1 audio channel, RCA			
10.	Recorder Bidirectional Talk	1channelInput,BNC,1 channel Output, RCA			
11.	Display Screen Mode	1,4,8,9,16, 32, ALL (Window)			
12.	Camera Scheduling	Supported (continuous/ motion/ event based)			
13.	On Screen Display	Date, Time, Camera Title, Video loss alert, motion detection alert, recording, camera lock alert, camera tampering, camera masking.			
14.	Video/ Audio Compression	Minimum H.265+or better/G.711 respectively (One Channel) or higher			
15.	Image Resolution	1080P (2MP) or higher, real- time recording @ 25 fps in all channels with selectable fps simultaneously.			
16.	Encoding Stream	1080P (2MP)or higher, real time recording @ 25 fps in all channels with selectable fps simultaneously. Should support upto 8 MP.			
17.	Video Encoding Bit Rate	IP video: 32~4096Kb/s or higher			
18.	Image Quality	6 levels (VBR) or equivalent.			
19.	Recording Mode	Manual, Schedule, Regular, Motion detection, Camera blank, Video loss. Stop Recording, FIFO and auto overwrite facility			
20.	Recording Priority	Manual; Alarm; Motion Detection & Regular			
21.	Recording Interval	Pre-record:1secto30sec.,Post-record:10sec~5minutes			
22.	Alarm Input	SupportedMinimum4			
23.	Relay Output	SupportedMinimum1			
24.	Water Marking	Supported			
25.	Playback Channel	1,2,4,16,32			

26.	Recorded Data Search Mode	Video Time & Date, Exact search(with Date, Hour, Minute and Second accuracy),Motion Detection, Alarm
27.	Playback Options	Play, Digital zoom (any size), Pause, Rewind, Slow motion, shift to Next file, shift to Previous file, one click Previous camera, one click Next camera, Full screen mode, Replay, Backup selection, Fast forward, Shuffling and masking. Provision for support of the 3rd party cloud storage (Global Standard Cloud support).
28.	Operation Over Network	Monitor, Playback, File download, Log information, System setting.
29.	Network protocols	HTTP;HTTPS;TCP/IP;IPv4/IPv6;UPnP;SMTP;NTP;DHCP ;DNS;DDNS;FTP; Alarm Server, IP search
30.	Hard Drive Storage Option	For 4 Channel – 2 SATA, 8 channel - 4 SATA, 16 & 32 Channel–8 SATA . Should support, up to 8 TB per SATA port.
31.	USB Interface	Minimum 2 Ports(one should be 3.0) for all & 1 e-SATA (for 16 & 32
32.	Serial Interface	1 Nos RJ 45 Interface for 4 & 8 and 2 Nos RJ45 for 16& 32
33.	Power Supply	AC100~240V,50/60Hz
34.	Working Environment	All Indoor weather conditions
35.	Duplex type	Recorders should be able to playback recorded footage without having to stop recording
36.	Certificate	CE, FCC, UL& BIS
37.	Compatibility	ON VIF registered for relevant profiles.
38.	HDD quality	Surveillance(2TB/4/6/8TB)

Annexure- 'G'A3'

Sr.	Parameters	Specifications
No		
Company		
Model		
1	Video standards	H.265+/H.265/H.264 / MPEG4 / MJPEG
2	Sensor	1/2.8 inch Progressive scan CMOS
3	Scanning	Progressive Scan system

4	System Compatibility	System Compatibility ONVIF(Profile G,S)
5	Resolution	2048 x 1536 (3MP)
6	Display Mode	14 Display mode Fish eye View, 180 Panorama View, 4PTZ, Fisheye + 3PTZ, 360 Panorama View, 360 Panorama + PTZ, 360 Panorama + 3PTZ, 360 Panorama + 6PTZ, 360 Panorama + 8PTZ, 2PTZ, Fisheye + 8PTZ, Panorama View, Panorama + 3PTZ, Panorama + 8PTZ
7	Field of View	horizontal field of view 180°, vertical field of view 180°
8	Frame Rate	25fps (1920 x 1080), 25fps (1280 x 960), 25fps (1280 x 720)
9	Lens	1.16mm Lens to Achieve 180° View
10	Minimum Illumination	Color: 0.005Lux @ (F1.2, AGC ON), 0.017Lux @ (F2.2, AGC ON), 0 Lux with IR on
11	IR Cut Filter	Yes & with Autoswitch
12	Wide Dynamic Range	120dB (less than 120dB not acceptable)
13	Audio Input-Output	Should supports, 1 audio input (line in), 1 audio output interface G.711/G.722.1/G.726/MP2L2/PCM
14	Alarm Input-Output	1 alarm input, 1 alarm output (12 VDC, max. 30 mA)
15	Intelligent Video Functions	Video tampering alarm, HDD full, HDD error, network disconnected, IP address conflicted, illegal login
16	Intelligent Video Functions	Motion detection, dynamic analysis, intrusion detection, line crossing detection
17	Protocols	TCP/IP, HTTP, HTTPS, FTP, DHCP,
18	Ethernet	1 RJ45 10M / 100M Ethernet port
19	Input voltage	12 VDC, 0.4 A, max.5 W PoE (802.3af, 36 V to 57 V), 0.2 A to 0.1 A, max.6.5 W
20	General Function:	One-key reset, anti-flicker, password protection, privacy mask, IP Address filtering, health monitoring, watermark
21	Operating Temp.	-10 °C to +50 °C
22	Local Storage	Micro SD/SDXC card slot, up to 128GB Surveillance Grade
23	Housing & Mount	Housing & Mount

24	Certification	BIS Standard (Indian Standard IS:13252)
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Annexure- 'G' A4'

2 MEGA PIXEL VARIFOCAL IPIR DOME CAMERA

S.No	Feature	Specification
1.	Image Sensor	2Megapixel progressive scan CMOS
2	Compression technology	Efficient H.265+ compression
2.	Effective Pixels	1920x1080
3.	Electronic Shutter	Auto/Manual,1/3(4)~1/10000s
4.	Video Frame Rate	25fps@2Mega Pixel
5.	Wide Dynamic Range WDR	120dB True WDR
6.	Mini. Illumination	0.005 Lux/F1.4(Color);0Lux/F1.4(I Ron)
7.	Stream Support	Triple Stream (One for NVR, One for Command centre and one for Mobile Access) <u>DUAL Stream not accepted</u>
8.	Min. IR Length	40m
9.	Day/Night	Auto(ICR)/ Color/ B/W
10.	Back Light Compensation	True WDR(Minimum120 dB or higher)
11.	Audio In/Out for Bi-directional Talk	Audio port I/O 1/1
12.	Focal Length(lens)	2.7~13.5mm with Motorized Lens
13.	Video Compression	H.265+orhigher
14.	Alarm Port In/Out	1 input, 1 output
15.	Frame Rate(triple Stream)	Main Steam 2MP @25 fps, Sub Stream D1 @ 25 fps Third Stream CIF @1 fps
16.	Bit Rate	H.265:40K~8192Kbps
17.	Network Ethernet	RJ-45(10/100Base-T)
18.	Network Protocol	IPv4/IPv6,HTTP,HTTPS,SSL,TCP/IP, UDP, UPnP, ICMP, IGMP,SNMP,RTSP,RTP,SMTP,NTP,DHCP,DNS,PPPOE, DDNS,FTP, IP Filter, QoS,
19.	Compatibility	ONVIF
20.	Power Supply	DC12V,PoE(802.3af)
21.	Working Environment	-30°C~+60°C/Lessthan95%RH(no condensation)
22.	Ingress Protection	MinIP67
23.	Vandalism Protection	IK 10rated , METAL BODY Camera
24.	Video Analytics	Motion detection, video tampering alarm, exception, Line crossing detection, intrusion detection
25.	Certification	BIS Standard (Indian Standard IS:13252)
26.	Memory card	Upto256Gb
27.	Mac ID	Should be in the name of OEM

Annexure- 'G' A5'

2MEGA PIXEL IPIR DOME FIXED LENS CAMERA

S.No	Feature	Specification
1.	Image Sensor	2Megapixel progressive scan CMOS
2.	Compression technology	Efficient H.265+ compression
2.	Effective Pixels	1920 x 1080
3.	Electronic Shutter	Auto/Manual, 1/3(4)~1/10000s
4.	Video Frame Rate	25 fps @ 2 Mega Pixel
5.	Wide Dynamic Range WDR	120dB True WDR Only accepted
6.	Mini. Illumination	0.005 Lux/F1.4(Color);0Lux/F1.4(IR on)
7.	Stream Support	Triple Stream (One for NVR, One for Command centre and one for Mobile Access) DUAL Stream not accepted
8.	Min. IR Length	40m
9.	Day/Night	Auto(ICR) / Color / B/W
10.	Back Light Compensation	True WDR(Minimum120 dB or higher)
11.	Audio In/Out for Bi-directional Talk	Audio port I/O 1 input, 1 output
12.	Focal Length (lens)	2.8mm Fixed lens
13.	Video Compression	H.265+ or higher
14.	Alarm Port In/Out	Alarm port I/O 1 input, 1 output
15.	Frame Rate (triple Stream)	Main Steam 2MP @25 fps, Sub Stream D1 @ 25 fps Third Stream CIF @1 fps
16.	Bit Rate	H.265: 40K ~ 8192Kbps
17.	Network Ethernet	RJ-45 (10/100Base-T)
18.	Network Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS,
19.	Compatibility	ONVIF
20.	Power Supply	DC12V, PoE (802.3af)
21.	Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)
15.	Network Ethernet	RJ-45
16.	Protocol	IPv4/IPv6,HTTP,HTTPS,SSL,TCP/IP, UDP, UPnP, ICMP, IGMP,SNMP,RTSP,RTP,SMTP,NTP,DHCP,DNS,PPPOE,DDNS,FTP,IPFilter,QoS,
17.	Compatibility	ONVIF
18.	API	Open network video interface, ISAPI
19.	Event	Motion detection, video tampering alarm, exception, Line crossing detection, intrusion detection
20.	Power Supply	DC12V,PoE(802.3af)
21.	Working Environment	-30°C~+60°C/Lessthan95%RH(no condensation)
22.	Ingress Protection	IP67, IK10 (<i>Metal Body with Dome cover to avoid lens Change by hand</i>)
23.	Certification	BIS Standard (Indian Standard IS:13252)
24.	Mac ID	Should be in the name of OEM

Annexure-'G'A6'

2MEGAPIXELFIXEDIPIRBULLETCAMERA

S.No	Feature	Specification
1.	Image Sensor	2Megapixel progressive scan CMOS
2	Compression technology	Efficient H.265+ compression
2.	Effective Pixels	1920 x 1080
3.	Electronic Shutter	Auto/Manual, 1/3(4)~1/10000s
4.	Video Frame Rate	25 fps @ 2 Mega Pixel
5.	Wide Dynamic Range WDR	120dB True WDR Only accepted
6.	Mini. Illumination	0.005 Lux/F1.4(Color);0Lux/F1.4(IR on)
7.	Stream Support	Triple Stream (One for NVR, One for Command centre and one for Mobile Access) DUAL Stream not accepted
8.	Min. IR Length	40m
9.	Day/Night	Auto(ICR) / Color / B/W
10.	Back Light Compensation	True WDR(Minimum120dBor higher)
11.	Audio In/Out for Bi-directional Talk	Audio port I/O 1 input, 1 output
12.	Focal Length (lens)	2.8mm Fixed lens
13.	Video Compression	H.265+ or higher
14.	Mic	Inbuilt Mic
15.	Frame Rate (triple Stream)	Main Steam 2MP @25 fps, Sub Stream D1 @ 25 fps Third Stream CIF @1 fps
16.	Bit Rate	H.265: 40K ~ 8192Kbps
17.	Network Ethernet	RJ-45 (10/100Base-T)
18.	Network Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS,
19.	Compatibility	ONVIF
20.	Power Supply	DC12V, PoE (802.3af)
21.	Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)
22.	Network Ethernet	RJ-45
23.	Protocol	IPv4/IPv6,HTTP,HTTPS,SSL,TCP/IP, UDP, UPnP, ICMP, IGMP,SNMP,RTSP,RTP,SMTP,NTP,DHCP,DNS,P PPOE,DDNS,FTP, IPFilter, QoS,
24.	Compatibility	ONVIF
25.	API	Open network video interface, ISAPI
26.	Event	Motion detection, video tampering alarm, exception, Line crossing detection, intrusion detection
27.	Power Supply	DC12V,PoE(802.3af)
28.	Working Environment	-30°C~+60°C/Lessthan95%RH(no condensation)
29.	Ingress Protection	IP67, IK10 (<i>Metal Body with Dome cover to avoid lens Change by hand</i>)
30.	Certification	BIS Standard (Indian Standard IS:13252)
31.	Mac ID	Should be in the name of OEM

Annexure- 'G' A7'

2 MEGAPIXEL for 24*7 Colour Image IP IR DOME FIXED LENS CAMERA WITH INBUILT MICROSD/SDHC/SDXC CARD SLOT FORMIN 256GB

S.No	Feature	Specification
1.	Image Sensor	1/2.8" 2 MP Progressive scan CMOS or better
2.	Effective Pixels	1920x1080 or higher
3.	Video Frame Rate	25/30 fps@ 2 Mega Pixel
4.	Scanning System	Progressive
5.	S/N Ratio	More than 55 dB
6.	Min. IR LEDs Length	Upto30m
7.	Day/Night	Auto(ICR)/ Color/ B/W
8.	Back Light Compensation	True WDR(Minimum120dBorhigher)
9.	White Balance	Auto/Manual
10.	Focal Length(lens)	2.8mm /4mm
11.	Video Compression	H.265orhigher
12.	Resolution	2MP(1920x1080)or higher
13.	Frame Rate (Dual/triple Stream)	Main Steam 2MP @25 fps, Sub Stream D1 @ 25 fps Third Stream CIF @1 fps
14.	Bit Rate	H.265:40K~8192Kbps
15.	Network Ethernet	RJ-45withinbuiltmicrophone
16.	Protocol	IPv4/IPv6,HTTP,HTTPS,SSL,TCP/IP, UDP, UPnP, ICMP, IGMP,SNMP,RTSP,RTP,SMTP,NTP,DHCP,DNS, PPPOE,DDNS,FTP, IP Filter, QoS,
17.	Compatibility	ONVIF
18.	API	Open network video interface ISAPI
19.	Power Supply	DC12V,PoE(802.3af)
20.	On-Board storage	Built-in Memory Card slot, Support Micro SD/SDHC/SDXC card for minimum 128GB with audio.
21.	Working Environment	-30°C~+60°C/Lessthan95%RH(no condensation)
22.	Ingress Protection	IP67
23.	Certification	BIS Standard (Indian Standard IS:13252)

Note: All DVRs/NVRs and CCTV cameras should be tampered proof and can be connected to Command Centre through LAN Port and should be under ONVIF

ANNEXURE 'G' A8'

2 MEGAPIXEL VARIFOCAL IP IR BULLET CAMERA

S.No	Feature	Technical Specification
1.	Image Sensor	2 Megapixel progressive scan CMOS
2	Compression technology	Efficient H.265+ compression or equivalent

3.	Effective Pixels	1920 x 1080
4.	Electronic Shutter	Auto/Manual, 1/3(4)~1/10000s
5.	Video Frame Rate	25 fps @ 2 Mega Pixel
6.	Wide Dynamic Range WDR	120dB True WDR Only accepted
7.	Mini. Illumination	0.005 Lux /F1.4(Color);0Lux/F1.4(IR on)
8.	Stream Support	Triple Stream (One for NVR, One for Command centre and one for Mobile Access) Dual Stream not accepted
9.	Min. IR Length	50m
10.	Day/Night	Auto(ICR) / Color / B/W
11.	Back Light Compensation	True WDR (Minimum 120 dB or higher)
12.	Audio In/Out for Bi-directional Talk	Audio port I/O 1/1
13.	Focal Length (lens)	2.7~13.5mm with Motorized Lens
14.	Video Compression	H.265+ or higher
15.	Alarm Port In/Out	Alarm port I/O 1 input, 1 output
16.	Frame Rate (triple Stream)	Main Steam 2MP @25 FPS, Sub Stream D1 @ 25 fps Third Stream CIF @1 fps
17.	Bit Rate	H.265: 12kbps-6144kbps
18.	Network Ethernet	RJ-45 (10/100Base-T)
19.	Network Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP , SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS
20.	Compatibility	ONVIF
21.	Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)
22.	Power Supply	12V DC
23.	Power Consumption	10 watts maximum
24.	Weatherproof Ratings	Minimum IP67
25.	Vandalism proof	Metal Body
26.	Mac id	Should be in the name of OEM
27.	IR Range	≥ 50 mtr
28.	Memory card	Up to 256 GB
29.	Compatibility	ONVIF registered for relevant profiles
30.	Certifications	CE, FCC, UL & BIS

SURVEILLANCE GRADE SD CARD

S.No	Feature	Specification
1.	Grade	Surveillance Grade
2.	Capacity	64GB, 128GB & 256 GB
3.	Approved Make	Hikvision , Honeywell, SANDISK

Annexure-‘G’ A10’

OTHER COMPONENTS OF CCTV

Sl. No.	Item Name	
1	Hard Disk Drive(SAT A II or III)	Seagate SKYHAWK /WD Purple Video Surveillance series(Rated for 24x7 operation). 32-64 MB Cache,3Mb–6Mb per second data transfer rate, Spindle Speed7200 RPM or more.
	Capacity	2TB/4TB/6TB surveillance grade 8TB & 10TB Should be surveillance AI Drives with Backup recovery option
2	MONITOR	Anti-glare surveillance grade 24x7 working LED with TCO 03 or higher certification.
	Screen size	21.5”to 31.5 ”. 40”diagonalLED
	Warranty	03Years
	Video	PAL
	Resolution(Min)	Full HD(FHD)
	Power Input	12/24 VDC
	Viewing Angle	140°H,130°V
	Power Consumption	NOT EXCEEDING 40Watts/3star minimum
	Make	SAMSUNG/ DELL/LG/ACER/equivalent
3	Cable-Video	
	Category	Category–6/Cat6Cable(SFTP solid cable)
	Mutual Capacitance@300MHz	5.60nF/100mtrs maximum
	DC resistance@300MHz	9.38 ohm/100mtrs max at 20°C
	Impedance@ 300MHz	100+/-15ohm
	Insulation	High Density Polyethylene
	Sheath	Fire Retardant PVC Compound(FRPVC)
	Standards	TIA/EIA568 B.2-1
	Acceptable Quality	Make-Finolex/Polycab/Polycab or equivalent
4	Cable -Power	
	Category	2core power cable (Armoured)
	Type	2core 1sq.mmeach
	Acceptable Quality	ISI Marked(IS-694,1990)

	Insulation	PVC Insulated
5	PVC Conduits for cabling	
	Specifications	IS-9537-1983; Internal Dia 20 mm, Wall Thickness- 4.2-5mm
	Acceptable Quality	ISI Marked.
	Grade	Medium
6	6U Rack–(Wall Mount)	Dimension: 630mm x500mm depth Power Strip: 6 Socket power supply: 1 No. Equipment Mounting Tray: 1NoMountingscrews&studs: 1pack Transparent front door with Lock,Fan tray with 2 Fans, Provision for cable routing at the bottom of Rack.
7	I/O Box	Per Camera
8	Network POE Switch	
	Type	Unmanaged (Plug n Play type) with PoE Ports,10/100Mbps
	No. of input PoE ports	4/8/16/24 RJ45(10/100Mbps)
	Uplink ports	2,RJ45(10/100Mbps) 2 UPLINK is mandatory
	Network Protocol compliant	IEEE802.3i,IEEE802.3u,IEEE802.3xIEEE802.3af,IEEE802.3at,IEEE 802.3az
	LED Indicators	Power ON(System),Activity/Link, Speed, Power fault /Fail(Each PoE Port)
	Input Voltage	230 VAC
Surge Protection	6KV surge protector	
Operating temperature	0°C-40°C	
Make	TPLINK / CISCO or equivalent	
Power transmission	250 mtr with compatibility for PoE extender	