



File No. _____

Date _____

CENTRAL BANK OF INDIA, PANAJI REGIONAL OFFICE
NIZARI BHAWAN, 1st FLOOR, MENEZES BRAGANZA ROAD, PANAJI, GOA- 403001

REQUEST FOR QUOTATION (RFQ) FROM EMPANELLED VENDORS FOR THE SUPPLY , INSTALLATION AND ANNUAL MAINTENANCE OF CCTV SYSTEMS AND RELATED ACCESSORIES INSTALLED AT BRANCHES AND ADMINISTRATIVE OFFICES OF CENTRAL BANK OF INDIA (NON COMPREHENSIVE IN NATURE) UNDER THE JURISDICTION OF PANAJI REGIONAL OFFICE NIZARI BHAWAN, 1st FLOOR, MENEZES BRAGANZA ROAD, PANAJI, GOA- 403001

Central Bank of India invites sealed offers in Single bid system from empanelled manufacturers/ suppliers/ vendors for the supply, installation and maintenance of CCTV Systems and related accessories installed at Branches and Administrative Office of Central bank of India under the jurisdiction of Central Bank of India, Panaji Region Office.

As part of vigilance administration, the Central Vigilance Commission (CVC) has been promoting integrity, transparency, equity and competitiveness in Government / PSU transactions. It has, therefore, become imperative for PSBs, Insurance Companies and Financial Institutions also to now adopt Integrity Pact. The Integrity Pact (IP) envisages a panel of Independent External Monitors (IEMs) recommended by the Bank to be approved by CVC. After following the laid down norms, our Bank has appointed Shri Trivikram Nath Tiwari, mail ID trivikramnt@yahoo.co.in, as IEM. The task of IEM shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under the pact. The IEM shall not be subject to instructions by the parties and perform their functions neutrally and independently. All the parties accept that the IEMs have the right to access all the documents relating to the project / procurement, including minutes of the meetings.

1. OBJECTIVE & REQUIREMENT

Bank intends to select a vendor for the supply, installation and maintenance of CCTV Systems and related accessories installed at Branches and Administrative Office of Central bank of India under the jurisdiction of Panaji Regional Office. The supply of new CCTV System with accessories at Branches will be on need basis and will be placed / made by the Panaji Regional Office **for the period of 1 year from 01 Nov 2021 to 31 Oct 2022**. The selected vendor will also provide AMC support. All the existing CCTV Systems and Accessories installed at Branches and Administrative Offices irrespective of their make, model and type will be maintained and serviced by the vendor. The accessories include DVR, HDD, monitor, mouse etc. AMC contract for newly installed CCTV Systems will commence after expiry of warranty period of minimum one year. The same may be renewed every year with mutual consent for a maximum duration of three (03) years.

The complete details and RFP Forms can be obtained from Security Department at the following address on payment of Rs 200/- (Rs Two Hundred only – Non-

Refundable) by way of Demand Draft/ Pay Order favoring Central Bank of India payable at Panaji.

Address: - Central Bank of India, Regional office Nizari Bhawan, Ist Floor, Menezes Braganza road, Panaji, Goa- 403001.

RFP can also be downloaded from the Bank's website www.centralbankofindia.co.in. However, for RFP downloaded from website the Pay Order/ Demand Draft will have to be submitted along with the Techno-Commercial Offer.

Date of commencement of issue of RFP	20 Sep 2021
Last date/ time for submission of RFP	18 Oct 2021 at 1500 Hrs
Date of opening of the bids	20 Oct 2021 at 1300 Hrs
Fee for RFP documents (non - refundable)	Rs 200/- (Rs Two Hundred only)
Earnest Money Deposit (Bid security)	Nil
Validity of RFQ	30 Days

Note: - MSME Certificate holders are exempted for RFP Fee & EMD, but should enclose certified true copies of relevant certificates.

2. SCOPE OF WORK

The scope of work would include the following:-

- Maintenance of existing CCTV Systems and all related Accessories installed at Branches and Administrative Offices irrespective of their make, model and type
- Replacement of non-operational CCTV Systems and accessories with the new system, its installation and commissioning (old/existing CCTV system is to be taken on buyback basis). Order for such replacement will be placed / made by the Panaji Regional Office on need and case to case basis and suggested by AMC vendor.
- Installation and commissioning of CCTV System and related accessories at new branches and also shifting of existing CCTV system with accessories from Branches in case of merger / closure. Order for such new installation and shifting will be placed / made by the Panaji Regional Office on need and case to case basis.
- Provision of cabinet with lock and keys to secure DVR in BM cabin, wherever the DVR is not hidden.
- Availability of camera in ATM (onsite) is mandatory in availability of CCTV footage with BM.

Interested participants may conduct an initial Survey of some of our Branches (after taking approval from the Regional Office) to assess the current state. The firm has to conduct the survey at their own cost. Bank will not pay anything in this regards.

3. TERMS & CONDITIONS

- The Quotation shall be in the prescribed format only as given below and on the letter head of the party in a sealed cover super scribing "Quotations for Supply, installation and Annual Maintenance of CCTV Systems and all related accessories at Branches under Panaji Regional office " and shall be submitted to the Regional Manager, GAD/ (Security Department) at Panaji Regional Office , on or before due date i.e. **18 Oct 2021 at 1500 Hrs**.

- The Cost of Tender of Rs 200/- by Demand Draft payable at Panaji must accompany each tender and the tenders not accompanied by the Cost of Tender by Demand Draft are liable to be rejected as NON-RESPONSIVE.
- **The tender shall be valid for a period of not less than 30 days after the date of opening of Tender.**
- The rates shall have to be quoted only in the prescribed format mentioned in **Annexure I.**
- The supplier shall provide warranty for minimum One (01) year and specify condition of after sales service in his quotation.
- The Bank has got the right to accept or reject one or all the quotations without assigning any reasons.
- The Bank is not responsible for any delay in receipt of quotation sent by post/courier. The parties can submit the quotation at the above mentioned address on or before the due date and obtain the acknowledgement.
- The payment for the maintenance and the quarterly visit will be made by the respective Branches / Administrative Offices after satisfactory and timely repairs / supply and installation of CCTV System and its accessories as per specifications. However the order for any new installation will be placed / made by the Regional Office. All payments will be made through NEFT.
- No advance payment shall be made. The payment after the applicable deductions shall be made by crossed cheque/Net Banking only.
- The Company must depute their technicians to attend, any complaint with in specified time, to the concerned Branch / Administrative Office on receiving the information in writing or over the phone. **The defects reported from any local Branch / Administrative Office will be attended to and repaired within 24 hours.** **Company to deposit a letter with list of technician's available confirming them having no police case pending and FIR. Any technician disbarred by any PSB is not to be part of the team.**
- **The Company has to depute their technician with photo identity cards to make four mandatory quarterly visits to all the Branches / Administrative Offices.** A quarterly summary of the visit showing the type of CCTV System and its accessories installed at the Branches and their working status along with the duly signed visit report by the respective Branch managers / Administrative Office-in-charges are to be submitted to the Security Department positively.
- At the time of installation / maintenance visit the Company representative will give demonstration of operation / use of the CCTV System and its accessories. The company should depute technicians who are competent and capable to maintain / repair the CCTV System and its accessories. They should also be equipped with adequate spare parts and tools to carryout repairs at the Branch / Administrative Office at the time of visit.
- **The Bank reserve the right to terminate / modify the contract partly or fully, anytime without assigning any reason whatsoever. The Bank also reserves the right to deduct / forfeit any amount as deemed fit, payable for the installation / maintenance in case the required standards / specification of repairs / maintenance and installations are not kept / maintained and time schedule as laid down is not adhered to by the Company.**

- Any new installation of CCTV System and Accessories at any Branch / Administrative Office, whenever ordered, will be installed by the Company within 3 - 5 days from the receipt of confirmed order, from the Regional Office. Any delay in this will call for cancellation of order and penalty as decided by the Bank.
- Payments for all the spares consumed in breakdown maintenance will be released by the respective Branches. Only AMC payment as part of Preventive planned maintenance (PPM) will be paid by RO. The copy of the invoice along with the original installation certificate duly signed by the Branch Manager has to be submitted with the Regional Office (Security Department) for the office record & warranty. AMC payment after end of each quarter for all the branches will be done by RO on AMC (PPM – preventive planned maintenance). No branch to be left for any reasons in each quarter with issues if any resolved.
- In case of the defects not being attended to on time, Bank reserves the right to carry out the work through any other agency / agencies and such expenditure will be recovered from the vendor in due course of time.
- No advance shall be paid. Payment shall be done on completion of work. The bill shall be paid only on completion of the work to the satisfaction of occupant and Bank.
- The storing of material shall be the vendor's responsibility at his cost.
- The vendor shall be responsible and liable for compliance of all applicable labour laws including Workmen's Compensation Act, Contract Labour, Shops & Establishment, Policy of Insurance, Fire insurance. At no time shall you claim the above from the Bank.
- The vendor shall take care that the work is carried out without causing damage to the premises, electrical cables, etc. Any damage caused shall be rectified by the vendor at his own cost.
- The vendor shall vouch for safe, bonafied conduct and fidelity of the staff employed by him. Any damages caused willfully or in negligence to the work executed by him or other agencies shall be borne by him.
- Watch and ward in respect of all materials / equipment at the site for use in work shall be the vendor's responsibility.
- Any other conditions stipulated at the time of the placing the Orders have to be complied with.
- In the event of any dispute the sole arbitrator will be appointed by the consent of both the parties.

4. SPECIFICATIONS/ REQUIREMENT FOR THE CCTV SYSTEM

Detailed technical specifications are placed at Annexure-II.

- All the vital areas of the branch i.e entrance, customer lobby, cash counters, strong room, parking area etc has to be covered. **No camera to be available inside strong room having safe deposit lockers as per RBI guidelines.**
- The available cameras to be positioned in such a manner that blind spots in the branch are nullified.
- The recording has to be motion based and **minimum 90 / 180 days as per RBI guidelines from time to time.**
- The DVR should be suitably positioned so that it is not easily sighted and is not tampered with. It should have CMS port for future connectivity and capability to integrate with the existing Alarm System. **All DVR are to be in cabinet with lock and key.** Any branch not in such order to have made such arrangement.

Password to be provided to BM on each occasion of visit and not to be changed unless and until informed by BM. Any unhealthy hard disk replaced to be handed over to BM for custody.

- Cabling should be of ISI standard, inside conduits.
- The CCTV unit should be able to operate equally well on AC and DC mode.
- The CCTV should have uninterrupted UPS power supply.

5. OTHER TERMS & CONDITIONS

- The offer should be submitted in a sealed cover super scribing on the envelop “Quotations for Supply, installation and Annual Maintenance of CCTV Systems and all related accessories at Branches under Panaji Regional office ”. The price bids should be submitted as per Annexure-I (No change is permitted in the format). The offer should be submitted to the Regional Manager, GAD /(Security Department) at Panaji Regional Office on or before due date i.e. **18 Oct 2021 at 1500 Hrs**. The Offer should be complete in all respects and contain all information asked for in this document along with Cost of Tender.

Note: The RFQ documents should be submitted in original, duly signed and stamped at each page. Fax/ telegram/telex will not be acceptable.

6. PROCESS

Interested participants may conduct an initial Survey of some of our Branches (after taking approval from the Regional Office) to assess the current state. Subsequently, the firms are required to submit the Offers.

Order will be placed to the suppliers/vendors/manufacturers finally selected for supply, installation and maintenance of CCTV System and Accessories installed at Branches under TRO. **The bank reserves the right of placement of order over a period of three months from the date of finalization of the vendor.**

7. OPENING OF OFFERS

The Offers will be opened at **1300 Hrs on 20 Oct 2021**. The bidders/ their representatives may be present at the time of opening of the Offers. No separate intimation will be sent in this regard to the suppliers for deputing their representatives. The offers will be opened at the time and date stipulated above irrespective of the number of offers/ bidders or their representatives present.

8. During defect liability period (warranty period) supplier should attend to all repairs/ defects/ replacement of major/minor spare parts free of cost. In case of failure on the part of the supplier to attend to the defects within a reasonable period, the Bank on its own will get the defects rectified through another agency at the risk and cost of supplier and repairs rectified through another agency in such circumstance will not affect the liabilities of the supplier on the warranty for its remaining period nor will it affect the supplier's liabilities on the stipulated post-warranty Annual Maintenance Contracts.

Supplier shall be fully responsible for the manufacturer's warranty in respect of proper design, quality and workmanship of all equipment, accessories, etc., covered by the offer. The supplier must warrant all equipment's, accessories, spare parts, cables, etc., against any manufacturing defects during the warranty period. **The warranty envisaged is at least One (01) year Comprehensive Warranty.** During the warranty period the supplier shall maintain the equipment and repair/replace all the defective

components including cables at the installed sites. No additional charge of whatsoever nature will be paid by the Bank.

9. ANNUAL MAINTENANCE CONTRACT (AMC)

The non-comprehensive AMC will be for a period of 01 years (One year) commencing 01 Nov 2021 to 31 Oct 2022. List of branches under RO are placed in Annexure III to this proposal. Should the Bank decide to do so, the supplier is expected to maintain each gadget including all accessories/components/cables supplied for **at least One (01) years after the expiry of warranty period under AMC (Non-comprehensive)**, which may be renewed for a further period of one year. However, it will be decided by the Bank on the basis of the firm's performance during the agreement period and also on the basis of the firm's approach in advance for the same. During the warranty period & AMC period, the supplier is expected to visit the concerned branches at least once in a quarter for preventive maintenance/ servicing and on call by the Bank any number of times in case of defects, if any. The supplier shall maintain all the gadgets and repair/replace all defective minor components at no additional charge other than the AMC contract charges. The major repairs if any will be carried out with our consent telephonically to avoid delay. The AMC charges will be released in four installments by the respective Branches at the end of every three month period from the date of the expiry of warranty, on satisfactory performance of the each gadget and against submission of a service report.

10. PENALTY CLAUSE

The vendor shall have to resolve the issue within 01 working day of raising the service request (excluding Sundays and three National Holidays). **Penalty will be charged ₹ 500/- per day of delay after 24 hours. However, if problem remains unresolved after one week, the Bank reserves the right to cancel the order / contract.**

11. PAYMENTS

Payment shall be released by the concerned Branch/Region on completion of the installation, commissioning, successful operational checks of the system and acceptance by the Bank. No penalty or interest etc, shall be payable by the Bank for any overdue charges. The full payment shall be made post acceptance of the system only. **All payment for PPM (Preventive planned maintenance) as part of AMC on quarterly basis will be paid by Region office and all spares consumed during any breakdown maintenance will be paid by branch on submission of service reports and original Tax invoice. No branch is to be left for any reasons. Issues if any in the branch need to be resolved first and then forwarded for the payment. The tax invoice submitted for PPM (AMC) will be single tax invoice providing details of services completed in one quarter.**

12. SELECTION CRITERIA

The contract will be awarded to the participant whose rates will be the lowest. A visit to vendor office for services, stock of spares and technician professionalism may be inspected on genuineness of the quote. **Vendor also to produce the client list along with offer.**

13. INDEMNITY

The selected agency/ organization shall indemnify and hold the Bank harmless from & against any & all claims, liability, loss, demands, damages, actions, costs and charges

including legal expenses & counsel fees suffered or ascertained by the Bank or any third party dues for the Acts or omission on the part of vendor in operating, maintaining, monitoring the equipment, to which the Bank may become subject to or which it may have to pay or be held liable there for reason of any injury to persons, reputation or property suffered or sustained by any agency or employee of the Bank or arising out of negligence or omission of the selected agency/ organization.

14. THIRD-PARTY INFRINGEMENT CLAIMS

Supplier will defend at its expense or settle any third-party claim against Customer or its Affiliates alleging that Products, Services or Deliverables provided under this Agreement infringe intellectual property rights in the country where they were sold. Supplier will pay infringement claim defense cost, Supplier-negotiated settlement amounts, and damages finally awarded by the court. Supplier has no obligation for any claim of infringement arising from, and Customer will indemnify Supplier against any third-party claim arising from: (i) Supplier's compliance with Customer or third-party designs, specifications, instructions, or technical information; (ii) modifications made by any party other than Supplier; (iii) Customer's non-compliance with applicable Documentation (iv) Use of Products, Services or Deliverables for purposes not contemplated by this Agreement or applicable Documentation (including distribution to third parties); (v) Customer use or combination of Products, Services or Deliverables with products, software, or services that are not provided by Supplier; or (vi) a Product, Service, or Deliverable that is not at the most current release level if the most current release level is non-infringing.

15. LIMITATION OF LIABILITY

The Bank shall not be liable for any special or consequential damages that results from the use of, or the inability to use the materials on the site or the performance of the products. Applicable law may not allow the limitation or exclusion of liability or incidental or consequential damages so the above limitation or exclusion may not apply to you.

16. FORCE MAJEURE

Any failure or delay by bidder or Bank in performance of its obligation, to the extent due to any failure or delay caused by fire, flood, earthquake or similar elements of nature, or acts of God, war, terrorism, riots, civil disorders, rebellions or revolutions, acts of government authorities or other events beyond the reasonable control of non-performing Party, is not a default or a ground for termination. If Force Majeure situation arises the Vendor shall promptly notify Bank in writing of such conditions and the cause thereof. Unless otherwise agreed by bank in writing, the Vendor shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

Governing Law and Disputes (Applicable in case of successful bidder only)

All disputes or differences whatsoever arising between the parties out of or in connection with this contract or in discharge of any obligation arising out of the Contract (whether during the progress of work or after completion of such work and whether before or after the termination of this contract, abandonment or breach of this contract), shall be settled amicably. If however, the parties are not able to solve them amicably, party (CBI or Vendor), give written notice to other party clearly setting out there in specific dispute(s) and/or difference(s) and shall be referred to a sole arbitrator mutually agreed upon, and the award made in pursuance thereof shall be binding on the parties. In the absence of consensus about the single arbitrator, the dispute may be referred to joint arbitrator; one to be nominated by each party and the said arbitrators shall nominate a presiding arbitrator, before commencing the arbitration proceedings. The arbitration

shall be settled in accordance with the applicable Indian Laws. Any appeal will be subject to the exclusive jurisdiction of courts at Panaji.

The Vendor shall continue work under the Contract during the arbitration proceedings unless otherwise directed by the Bank or unless the matter is such that the work cannot possibly be continued until the decision of the arbitrator is obtained. Arbitration proceeding shall be held at Panaji, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.

Sd/-

(
Chief Manager)

COMMERCIAL BID**SUPPLY, INSTALLATION & MAINTENANCE OF CCTV SYSTEM WITH ACCESSORIES AT BRANCHES UNDER TRO (Rate repair contract)****Detailed technical specifications are placed at Annexure-II.****EQUIPMENT (for make/model refer Annexure II)**

Sr No	<u>Item description</u>	<u>Make & Model</u>	<u>Unit</u>	<u>Rate (Rs)</u>	<u>Qty</u>	<u>Total</u>
1	'8' Channel DVR with CMS port - CMS compatible. Synchronous play back at 1080 resolution. Compression H 264		Nos		1	
2	'16' Channel DVR with CMS port - CMS compatible. Synchronous play back at 1080 resolution. Compression H 264		Nos		1	
3	'2' TB HDD	Seagate/WD	Nos		1	
4	'4' TB HDD	Seagate/WD	Nos		1	
5	Varifocal HD WDR & IR dome camera 1.3 MP/720p		Nos		1	
6	Varifocal HD WDR dome camera 1.3 MP/720p		Nos		1	
7	Fixed 1.3 MP IP IR Dome Camera		Nos		1	
8	1.3 MP/720p Varifocal HD IR Bullet Camera		Nos		1	
9	1 MP/720p Fixed HD IR Bullet Camera		Nos		1	
10	High resolution pin hole camera		Nos		1	
11	LED colour monitor 19.5"/21"		Nos		1	
12	Cabling with RG 6 video cable and Power cable in PVC conduit.		Mtrs		Per mtr	
13	Per Camera shifting & re- installation charges (in case of shifting / renovation at Branch)		Nos		1	
14	Per Camera repositioning charges within the existing Branch premise.		Nos		1	
15	Power supply 12 volt 1 amp		Nos		1	
16	Power supply 12 volt 5 amp		Nos		1	
17	Power supply 12 volt 10 amp		Nos		1	
18	BNC & DC Connector		Nos		1	

19	VGA Cable 10 mtr		Mtrs		10	
20	LED Wall mount bracket 180 degree angle		Nos		1	
21	Installation / Re-Installation and commissioning of DVR charges		Nos		1	
22	2U DVR Rack with installation		Nos		1	
23	4U DVR Rack with installation		Nos		1	
24	Buy Back of existing '4' Ch DVR		Nos		1	(Less)
25	Buy Back of existing '8' Ch DVR		Nos		1	(Less)
26	Retrieval of CCTV footages per branch per visit.		Nos		1	
27	SMPS Power supply for 8-Ch DVR		Nos		1	
28	SMPS Power supply for 16-Ch DVR		Nos		1	
29	Supply and fitment of wall mount cabinet with lock and key for securing DVR in BM cabin, if not hidden.		Nos		1	
					Total	

AMC OF EXISTING CCTV SYSTEMS

Sr No	<u>Parameters</u>	<u>Rate (Rs)</u>
1	AMC (Per annum) including one mandatory visit in each quarter for testing/servicing of CCTV Systems and its accessories. <i>AMC rate should include one consolidate figure for each Branch.</i>	

- * AMC charges & Taxes will not be considered while arriving at L1.
- * Payment for cabling will be purely on actual usage.
- * L1 rate will be arrived at taking into consideration, the rates and the total amount quoted for the Equipment estimated (Table I).

Signature of the Service Provider

MINIMUM TECHNICAL SPECIFICATIONS REQUIRED FOR THE SECURITY GADGET

<u>TECHNICAL SPECIFICATION FOR 4/8/16 CHANNEL STAND ALONE TRIBRID</u>					
<u>DIGITAL VIDEO RECORDER (DVR)</u>					
Sr No	Parameters	Specifications			Remarks
1	Video compression	4-Channel	8-Channel	16-Channel	All has to be Min 2 MP HD DVR's
		H.264 High Quality Decoding			Must be Min 2 MP HD DVR's
2	Analog and HD-TVI video input	4-Channel	8-Channel	16-Channel	Min required Resolution 1080 x 720
		BNC interface (1.0Vp-p, 75 Ω)			Full Copper Wired BNC
3	Supported camera types	AHD, TVI, Existing Analog Camera, IP, 720P/25, 720P/30, 720P/50, 720P/60, 1080P/25, 1080P/30, CVBS cameras,			
4	IP video input	1-Channel (total upto 5 Channel)	2-Channel (total upto 10 Channel)	2-Channel (total upto 18 Channel)	
		Min 2 MP resolution			
5	Audio compression	G.711u			
6	Audio input / Two-way audio in	4-Channel	8-Channel	16-Channel	
		(2.0 Vp-p, 1 KΩ), Min 1-Max 4 Audio inputs			
7	HDMI / VGA output	1920 × 1080 / 60 Hz, 1280 × 1024 / 60 Hz, 1280 × 720 / 60 Hz, 1024 × 768 / 60 Hz			
8	Encoding resolution	Main stream: 1080P(non-real-time) / 720P / VGA / WD1 / 4CIF / CIF			
		Sub-stream: WD1 / 4CIF(real-time) / CIF / QCIF / QVGA			

9	Frame rate	Main stream: 1/16 fps ~ Real time frame rate			
		Sub-stream: 1/16 fps ~ Real time frame rate			
10	Video bitrate	32 Kbps to 6 Mbps			
11	Audio output	1-ch, RCA (Linear, 1KΩ)			
12	Audio bitrate	64 Kbps			
13	Dual-stream	Support			
14	Stream type	Video, Video & Audio			
15	Synchronous Playback Resolution	4-Channel	8- Channel	16 -Channel	
		1080P / 720P / WD1 / 4CIF / CIF / QCIF/ MPEG4			
16	Network protocols	TCP/IP, PPPoE, DHCP, DNS, DDNS, NTP, SMTP, SNMP, NFS, iSCSI, UPnP™, HTTPS			EZVIZ Cloud P2P - If available, is to be disabled
17	SATA	Min 1 SATA interface (Each SATA to support upto 4 TB) for 4 Channel Min 1 SATA interface (Each SATA to support upto 4 TB) for 8 & 16 Channel			
18	Capacity	4-Channel	8- Channel	16 -Channel	
		2 TB HDD	4 TB HDD	4 TB HDD	
19	E SATA	1 PORT			
20	Network interface	4-Channel	8- Channel	16 -Channel	
	interface	1; 10M / 100M self-adaptive Ethernet interface		1; 10M / 100M / 1000M self-adaptive Ethernet interface	
21	Serial interface	1; standard RS-2085 serial interface, Half duplex/ Full duplex			
22	USB port	2 × USB 2.0 Ports			
23	Alarm in / out	4 INPUT / 1 OUTPUT		4 INPUT / 2 OUTPUT	

24	Power supply	12V DC			
25	Consumption (without hard disks)	≤ 15W	≤ 20W	≤ 30W	
26	Working temperature	-10 °C ~+55 °C (14 °F ~ 131 °F)			
27	Working humidity	10% ~ 90%			
28	Chassis	1U chassis		1U/2U chassis	
29	Certifications	UL,CE,FCC			
30	Recording Resolution	1080p/ 720p/ VGA/ WD1/ 4CIF/ CIF/ QVGA/ QCIF			
31	Record Rate- Main Stream	1080p/ 720p/ VGA/ WD1/ 4CIF/ CIF/ QVGA/ QCIF (1/16 fps to Real-time frame rate)			
32	Record Rate- Extra Stream	WD1/ 4CIF/ CIF/ QCIF/ QVGA (1/16 fps to Real-time frame rate)			
33	Record Mode	Manual/ Schedule/ Motion detection			
34	Privacy Masking	Supported			
35	OSD	Camera Title, Time, Vide Loss, Recording, Motion Detection			
36	Remote	Yes, IR			
37	Accepted Make/Brand	Hikvision, Dahua, Methodex			

TECHNICAL SPECIFICATION FOR 4/8/16 CHANNEL

NETWORK VIDEO RECORDER (NVR)

Sr No	Parameters	Specifications	Remarks
1	IP video input	8 Ch/ 16 Ch	
2	Two-way audio	1 Ch, RCA (2.0 Vp-p, 1KΩ)	
3	Incoming bandwidth	2 Mbps	

4	Outgoing bandwidth	2 Mbps	
5	Remote connection	128	
6	Recording resolution	6MP/5MP/3MP/2MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF/ MP4 /AVI	
7	Frame rate	Main stream: Min 30 fps/ 50 fps (P)/ 60 fps (N) Sub-stream: 50 fps (P) / 60 fps (N)	
8	HDMI/VGA output	1 Ch, resolution:	
		1920 × 1080 /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
9	Audio output	1-ch, RCA (Linear, 1KΩ)	
10	Live view / Playback resolution	6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF	
11	Capability	8-ch@720P, 6-ch@1080P	
12	SATA	8 SATA interfaces for 4 HDDs + 1 DVD-R/W (default), or 8HDDs (1 or 2 HDD support is also fine for branches with high capacity HDD for cost effective solution)	
13	eSATA (Optional)	1 eSATA interface	
14	Capacity	Up to 4/6/8 TB capacity for each HDD to cover 90 days recording	
15	Network interface	2 RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interfaces	
16	Serial interface	RS-232 and RS-485	
17	USB interface	2 × USB 2.0 + 1 × USB 3.0	
18	Alarm in / out	16/ 4 (optionally can be expanded to 16/ 8)	
19	Power supply Consumption (without hard disk or DVD-R/W)	100 ~ 240 VAC ≤ 20 W	
20	Working temperature	-10 °C ~ +55 °C (14°F ~ 131°F)	
21	Working humidity	10 % ~ 90 %	
22	Chassis	19-inch rack-mounted 2U chassis	

23	Dimensions (W × D × H)	Preferred - 445 × 470 × 70 mm (17.5"× 18.5" × 2.8")	Size may change as required
28	Weight(without hard disk or DVD-R/W)	Preferred = ≤ 8 kg (17.6 lb)	Weight may change as required
29	Accepted Make/Brand	Hikvision, Dahua, Methodex	

<u>VARIFOCAI HD WDR (WIDE DYNAMIC RANGE) & IR (INFRARED RANGE) DOME CAMERA</u>			
Sr. No	Parameters	Specifications	Remarks
1	Image Sensor	1.3MP 1/3" CMOS Image Sensor	
2	Effective Pixels	1280(H)*960(V)	
3	Min. Illumination	0.01 Lux @(F1.2,AGC ON), 0 Lux with IR	
4	Shutter Time	1/25(1/30) s to 1/50,000 s	
5	Lens	2.8 - 12 mm @ F1.4	
		Angle of view: 97° - 30.4°	
6	Lens Mount	φ14	
7	Angle Adjustment	Pan: 0 - 360°, Tilt: 0 - 75°, Rotation: 0 - 360°	
8	Day & Night	Auto with ICR	
9	Synchronization	Internal synchronization	
10	Video Frame Rate	720p@25fps/720p@30fps	
11	HD Video Output	1 Analog HD output	
12	CVBS Output	Can Connect to any existing or HD DVR	
13	S/N Ratio	>62dB	
14	Working Temperature/Humidity	-40 °C to +60 °C(-40 F - 140 F)	
		Humidity 90% or less (non-condensing)	

15	Power Supply	12V DC±15%	
16	Power consumption	4.7 W maximum	
17	Weather Proof Ratings	IP66	
18	IR Range	Minimum 10 meters	
19	Certifications	UL / CE / FCC	
20	Accepted Make/Brand	Hikvision, Dahua, Methodex	

NOTE: - The Camera facing the main entrance of the Branch or the locations where the Sun lights appear opposite to the camera must be a WDR type or equivalent camera. The purpose is to see the object or person image clearly in the monitor screen.

<u>FIXED 1.3MP IP IR DOME CAMERA</u>			
Sr. No	Parameters	Specifications	Remarks
1	Video standards	H.264 / MPEG4 / MJPEG	
2	Sensor	1/3 inch HD resolution CMOS/CCD	
3	Scanning	Progressive Scan system	
4	System Compatibility	ONVIF	
5	Resolution	720 to 1280 (H) x 960 (V)	
6	Signal Stream	Dual Stream	
7	Lens	Min 3.6 mm - Max 12 mm	
8	Minimum Illumination	0.01 lux@F1.2	
		0 lux with IR	
9	IR Cut Filter	Yes	
10	Wide Dynamic Range	Yes	

11	Digital noise reduction	3D DNR (if Audio enabled Camera)	
12	Day & night	Auto ICR	
13	AGC	Yes	
14	BLC/HLC	Yes	
15	Iris control	DC drive	
16	IR Range	Minimum 10 meters	
17	Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP,	
		DNS, DDNS, RTP, RTSP, RTCP, PPPoE,	
		NTP, UPnP, SMTP, SNMP, IGMP, 802.1X,	
		QoS, IPv6,	
18	Ethernet	1 RJ45 10M / 100M Ethernet port	
19	Input voltage	12 VDC $\pm$ 10% or PoE, IEEE 802.3 af	
20	Operating Temp.	-10°C to +50°C	
21	Operating Humidity	Humidity 95% or less (non-condensing)	
22	Local Storage	Micro SD/SDXC card slot, up to 128 GB (High Speed HD Card)	
23	Alarm trigger	Motion detection, tampering alarm, network disconnect, IP address conflict, storage exception	
24	Security	Watermark, User authentication, IP address filtering, anonymous access.	
25	Enclosure	IEC60068 up to IK10 Impact protection	
26	Certification	UL / FCC / CE	
27	Accepted Make/Brand	Hikvision, Dahua, Methodex	
<u>VARIFOCAI HD IR BULLET CAMERA</u>			
Sr. No	Parameters	Specifications	Remarks
1	Image Sensor	1.3MP 1/3" CMOS Image Sensor	

2	Effective Pixels	1080 to 1280(H)*960(V)	
3	Min. Illumination	0.01 Lux @(F1.2,AGC ON), 0 Lux with IR	
4	Shutter Time	1/25(1/30) s to 1/50,000 s	
5	Lens	2.8 - 12 mm @ F1.4	
6		Angle of view: 97° - 30.4°	
7	Lens Mount	φ14	
8	Angle Adjustment	Pan: 0 - 220°, Tilt: 0 - 75°, Rotation: 0 - 220°	
9	Day & Night	Auto with ICR	
10	Synchronization	Internal synchronization	
11	Video Frame Rate	720p@25fps/720p@30fps	
12	HD Video Output	1 Analog HD output	
13	CVBS Output	Can Connect to any existing or HD DVR	
14	S/N Ratio	> 62dB	
15	Working Temperature/Humidity	-40 °C to +60 °C(-40 F - 140 F)	
16		Humidity 90% or less (non-condensing)	
17	Power Supply	12V DC±15%	
18	WDR	120 Db	
19	Weather Proof Ratings	IP66	
20	IR Range	From 10 to 40 Meters	
21	Certifications	UL / CE / FCC	
22	Accepted Make/Brand	Hikvision, Dahua, Methodex	

FIXED HD IR BULLET CAMERA

Sr.	Parameters	Specifications	Remarks
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No			
1	Image Sensor	1.0MP 1/3" CMOS Image Sensor	
2	Effective Pixels	1080 to 1280(H)*960(V)	
3	Min. Illumination	0.01 Lux @(F1.2,AGC ON), 0 Lux with IR	
4	Shutter Time	1/25(1/30) s to 1/50,000 s	
5	Lens	3.6 mm (6 mm, 12 mm optional)	
6		Angle of view: 97° - 30.4°	
7	Lens Mount	φ14	
8	Angle Adjustment	Pan: 0 - 220°, Tilt: 0 - 75°, Rotation: 0 - 220°	
9	Day & Night	Auto with ICR	
10	Synchronization	Internal synchronization	
11	Video Frame Rate	720p@25fps/720p@30fps	
12	HD Video Output	1 Analog HD output	
13	CVBS Output	Can Connect to any existing or HD DVR	
14	S/N Ratio	>62dB	
15	Working Temperature/Humidity	-40 °C to +60 °C(-40 F - 140 F)	
		Humidity 90% or less (non-condensing)	
17	Power Supply	12V DC±15%	
18	Weather Proof Ratings	IP66	
19	IR Range	Upto 30m	
20	Certifications	UL / CE / FCC	
21	Accepted Make/Brand	Hikvision, Dahua, Methodex	

TECHNICAL SPECIFICATIONS FOR HIGH RESOLUTION PIN HOLE CAMERA

Sr. No	Parameters	Specifications	Remarks
1	Pick-up device	1/3" SONY CCD	
2	Effective pixels	NTSC: 768*494.PAL:752*582	
3	Resolution	Color-700 TVL 720 TVL	
4	Sync system	Internal	
5	Min. illumination	Colour-0.01Lux B/W 0.001Lux	
6	S/N ratio	More than 50dB	
7	Electronic shutter	Auto, 1/50 (1/60), 1/100,000 sec	
8	Lens	3.7mm Pin Hole (2.8mm optional)	
9	D-WDR	Off/Indoor/Outdoor	
10	Mirror function	On/off	
11	BLC	On/off	
12	Motion detection	Yes	
13	Gamma	Auto/manual	
14	White balance	ATW/AWB/AWC Set/Manual/Indoor/Outdoor	
15	AGC	Off/Low/Middle/High	
16	Day & Night	Color/B/W/Auto level adjust	
17	Video output	1.00V p-p Composite Video Output, 75 Ohm	
18	Power supply	DC12V	
19	Power consumption	3 Watts max	
20	Certification	UL / CE / FCC	
21	Accepted Make/Brand	Hikvision, Dahua, Methodex	

TECHNICAL SPECIFICATIONS FOR 21" / 32" LED COLOUR MONITOR

Sr. No	Parameters	Specifications	Remarks
1	Screen	TFT-LED Backlight	
2	Screen Size	19.5 Inches/ 21 Inches / 32 Inches	
3	Resolution	1920 X 1080 Full HD Display	
4	Viewing Angle	170 Degree Wide	
5	Video Input Mode	HDMI, VGA, RC Signal	
6	On-Screen Display (OSD) Menu	True Colour and User Friendly operation Menu	
7	Aspect Ratio	Supports 16:9 or 4:3 aspect ratio selectable in OSD Menu	
8	Audio	Built-In Speaker and Audio Amplifier Adopt 3D Noise Reduction Technology	
9	Mount	VESA stand	
10	Certification	ISI / CE / UL / FCC Certificate or any other standard certificate in the field	
21	Accepted Make/Brand	Sony, LG, Samsung, Hikvision, Dahua	

LIST OF BRANCHES UNDER PANAJI REGION OFFICE**Annexure III**

<u>SNO.</u>	<u>BRANCH</u>	<u>BRANCH CODE</u>	<u>SIZE</u>	<u>RISK CAT.</u>	<u>Location</u>
1	ALTO PORVORIM	1670	LB	SU	GOA
2	ASSAGAO	716	MB	RURAL	GOA
3	BAPSORO	1465	MB	RURAL	GOA
4	BICHOLIM	4901	MB	SU	GOA
5	BORDA	1457	LB	SU	GOA
6	CALANGUTE	3452	MB	SU	GOA
7	CANACONA	4641	SB	SU	GOA
8	CARMONA	717	MB	RURAL	GOA
9	CHIPLUN	2556	MB	SU	RATNAGIRI
10	CHODAN	718	MB	RURAL	GOA
11	CUNCOLIM	714	MB	SU	GOA
12	CURTORIM	719	LB	SU	GOA
13	DAPOLI	1374	MB	SU	RATNAGIRI
14	DEWOOLWADA	1769	MB	RURAL	SINDHUDURG
15	DIVAR PIEDADE	720	MB	RURAL	GOA
16	JAKADEVI	2662	MB	RURAL	RATNAGIRI
17	KAKODA	1470	MB	SU	GOA
18	KHED	3345	MB	SU	RATNAGIRI
19	KUDAL	4595	MB	SU	SINDHUDURG
20	MAPUSSA	721	VLB	SU	GOA
21	MARGAO BRANCH	715	VLB	SU	GOA
22	MARGAO CURRENCY CHEST	715	CC	SU	GOA
23	MENCUREM	2258	MB	RURAL	GOA
24	MOPA	2644	MB	RURAL	GOA
25	NAVELIM	3758	MB	SU	GOA
26	PANAJI	713	VLB	SU	GOA
27	PARODA	1577	MB	RURAL	GOA
28	PERNEM	722	MB	RURAL	GOA
29	PONDA	3454	MB	SU	GOA
30	POPHALI	643	MB	RURAL	RATNAGIRI
31	RAIA	723	MB	SU	GOA
32	RATNAGIRI	642	LB	SU	RATNAGIRI
33	RIVONA	724	MB	RURAL	GOA
34	SAITWADA	644	MB	RURAL	RATNAGIRI
35	SATARDA	2207	MB	RURAL	SINDHUDURG
36	SAWANTWADI	3536	MB	SU	SINDHUDURG
37	SAWARDE	3346	MB	RURAL	RATNAGIRI
38	TALEIGAO	4642	MB	RURAL	GOA
39	TILAMOL	4510	MB	SU	GOA
40	VALPOI	725	MB	RURAL	GOA
41	VASCO DA GAMA	726	VLB	SU	GOA
42	VERNA	727	LB	RURAL	GOA
43	WATAD	4312	MB	RURAL	RATNAGIRI
44	ST XAVIERS COLLEGE, MAPUCA	4049	LR	SU	GOA
45	VVM MARGAO	4050	MB	SU	GOA
46	PANAJI REGION OFFICE				GOA