

INSTALLATION/COMMISSIONING OF ACCESS CONTROL SYSTEMS

IN THE

OFFICE OF THE ACCOUNTANT GENERAL (A&E), TAMIL NADU

361, ANNA SALAI, TEYNAMPET, CHENNAI -18

Website: www.agae.tn.nic.in

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CHAPTER I

1.0 Objective

It is proposed to install appropriate access control equipments at four locations in the Office of the Accountant General (A&E), Tamil Nadu to have a record of staff and visitors who enter and exit office. It also envisages use of walk through Metal detector and also Hand held Device wherever necessary in case of visitors.

1.1 System components

The proposed system consists of the following components:

- 1.1.1 Waist high flap barrier turnstile with a combination of finger print and RFID reader at the Main entrance (3 Nos.)- **Location A**
- 1.1.2 Two RFID/finger print reader to be installed in the door at the side entrance with door closer with magnet- **Location B**
- 1.1.3 Waist high drop arm tripod turnstile with a combination of finger print and RFID reader at two locations (2 Nos. each) - **Location C and D**
- 1.1.4 Irrespective of the type of equipment selected for different locations, the following features are required
 - A) Facility for capturing finger prints
 - B) Facility for RFID card reader utility
 - C) In-built TCP/IP connectivity for communicating with Server and turnstile
 - D) Centralized application software
- 1.1.5 Walk through Metal Detector (1no)
- 1.1.6 Two Hand held Metal Detectors with standard 9V battery sound vibration, water proof and 40Khz operating frequency.
- 1.1.7 RFID card writer (for new employee and visitors)
- 1.1.8 Bio-metric and RFID sensors should be mounted on the access control equipments i.e bi-directional tripod turnstile, flap barrier turnstile device and door type. The equipment should be operated from both the sides.
- 1.1.9 The equipments while in closed condition should block entry of personnel by default and the unit will operate only after successful identification of the personnel with RFID or personnel

with finger print. The unit will operate once for every successful validation. The timing allowed for one entry/exit should be adjustable in terms of seconds/minutes per person.

- 1.1.10 There has to be sensors which should detect emergency conditions like fire, smoke etc and the gates should be automatically opened for facilitating easy evacuation of staff inside office buildings.
- 1.1.11 The access control system shall be designed such that the turnstile gate shall open by default in the event of power failure.
- 1.1.12 Installation of walk through metal detector at location 'A' ie. main entry to monitor the movement of visitors, wherever necessary.
- 1.1.13 Providing of **two** Hand Held metal detectors .

CHAPTER II

2.0 Scope of work

- 2.0 The scope of work covers the following components
- 2.1.1 Supply, installation, commissioning, conducting performance test run, training and providing documentation of the working of the access control system.
- 2.1.2 Laying of power cables and LAN cabling connecting the equipments with the server. Metal detector and hand Held Device work in stand alone condition.
- 2.1.3 The data relating to any personnel entering and exiting the premises should be captured by the access control system.
- 2.1.4 The vendor should conduct enrollment process for the biometric access control system to capture the finger prints of the staff for validation in the security system and also enter the details in the RFID card and issue RFID card.
- 2.1.5 The Office has the right to buy only one or few or all components specified at 1.1.

2.2 Supply

- 2.2.1 The supply shall include the waist High Tripod turnstile(4 Nos), Flap barrier turnstile(3 Nos., inter connection cables (power and signal) associated fittings/erection materials, bio-metric reader & RFID reader(16 Nos), access control software, walk through metal detector, Hand Held devices, RFID reader and any other equipment required for installation of access control system.
- 2.2.2 Until such time the equipments are successfully taken over by the office, the responsibility for the equipments and system lies with the vendor.
- 2.2.3 The vendor shall supply the complete documentation i.e., technical catalogues for various components, power/signal diagrams, test certificates, warranty certificates, user manuals etc.

2.3 INSTALLATION, COMMISSIONING AND PERFORMANCE TEST RUN

- 2.3.1 The vendor shall position and erect the turnstile at the locations identified by this office
- 2.3.2 The vendor shall mount RFID plus bio-metric reader on both sides of the turnstile
- 2.3.3 The vendor shall do the inter connection cabling between turnstile, bio-metric devices and LAN port.
- 2.3.4 Attendance management software to be installed in hardware provided by this office and commission the same. All locations to be linked to this and ensure that data is getting collected in the hardware provided by this office.

- 2.3.5 The vendor should provide all labour, cabling, tools, parts required to install the components and test to ensure functionality

2.4 Trial Run

- 2.4.1 The system will be under trial run for a period of one month from the date of successful commissioning. The representatives of the Office would declare successful commissioning of the system.
- 2.4.2 During trial run vendor shall create database of all employees/contract personal etc., and ensure successful operation of the system
- 2.4.3 RFID cards shall be designed inline with the existing departmental ID card and must be mapped to the employee ID number provided by this office.

2.5 Training

- 2.5.1 The vendor shall provide required training to nominated officials of this office on maintenance and operational aspects of Access control system
- 2.5.2 The vendor will provide training on any active parts and demonstrate setup/disassemble of the unit(s) described within the specification above
- 2.5.3 The vendor has to train a set of personnel of the Office to write

2.6 Documentation

- 2.6.1 The vendor shall provide technical literature for each component of access control system. Data sheet, wiring diagram, inter-connection block diagram, Operation and Maintenance manual etc. shall also be provided
- 2.6.2 The warranty certificate, test certificates indicating codes and standards shall also be provided

2.7 Inspection of materials before despatch

This office at its option may send their representative to inspect the materials/components/spares supplies against this order at vendors works. Vendor to extend all necessary test facilities to carry out inspection at their works at no extra cost.

2.8 Attendance Management System

- 2.8.1 Attendance management software should be supplied by the vendor and installed in the hardware provided by the office for capturing the entry and exit details of the employees. A mobile application of this software is preferable, additionally.
- 2.8.2 Various Reports as required by Administration should be customized.

Chapter III - Terms and conditions

3.1 Acceptance / Rejection of bid

- 3.1.1 This office reserves the right to accept tender in whole or in part or, reject any or all tenders without assigning any reason whatsoever.
- 3.1.2 Further, this office shall not be bound to accept the lowest tender and acceptance of tender may also be based on systems with technically sound features. In this regard, the decision of this office shall be final.
- 3.1.3 Bid documents from the vendors should be for the entire scope of work covered under this tender. Tenders with quotes for selected items shall not be entertained.
- 3.1.4 Specifications mentioned in the tender document are minimum requirements for the proposed system, however vendor may offer higher configuration over and above the requirement. Offers not meeting the minimum requirement shall be liable for rejection

3.2 Delivery of Material

- 3.2.1 Equipments, materials shall be delivered at Office of the Accountant General (A&E),361, Anna salai, Teynampet, Chennai 18.
- 3.2.2 Packing & unpacking, Loading & unloading of material shall be in vendors scope

3.3 Work completion period

Entire supplies, installation and commissioning shall be completed within 30 days from the date of placement of Work order.

3.4 Additional notes

- 3.4.1 The vendor must indicate the make and model item wise.
- 3.4.2 The vendor shall provide list of installations and customer references of similar access control systems in India, preferably from Government offices, Companies, Government bodies.
- 3.4.3 The vendor's entire staff shall follow the instructions of this office for taking up any job inside this office.

3.5 Earnest Money Deposit:

An earnest money deposit of Rs.50000 has to be furnished by all the bidders. EMD should be in the form of a DD in favour of PAO/IAD. Bids without EMD will be rejected.

3.6 Composite Performance Bank Guarantee (CPBG)

- 3.6.1 The bidder (s) with whom the contract is finalized and intimation so given will have to submit either an Account Payee Demand Draft in favour of PAO/IAD, or Performance Bank Guarantee for an amount equivalent to 10 % of the Work order / Contract value, which shall be valid for a minimum period of 2 months beyond the expiry of the warranty / defects liability period.
- 3.6.2 The bank guarantee on stamp paper of requisite value shall be accepted only from Scheduled Indian Banks (other than co-operative banks). All Bank Guarantee shall be unconditional and en cashable on presentation to the issuing Bank.

3.7 Warranty obligations

During the warranty period, the vendor shall attend trouble-shooting of any system malfunctioning /defective functioning/equipment failure etc...within 24 hours. Any part if found defective shall be replaced/repaired free of cost and the performance as guaranteed in the tender should be maintained.

3.8 Post-Warranty Annual Maintenance Contract(AMC)

3.8.1 It is mandatory for all the vendors to provide AMC support to this office for all supplied component & whole system for a period of 3 years, beyond the completion of regular warranty period of 1 year(12 months from completion of trial run). Vendors shall therefore, must quote charges towards AMC as part of its offer(comprehensive and semi-comprehensive), without which the bid will be considered invalid & summarily rejected. The post-warranty AMC amount will be reckoned for evaluation of the bid. A separate PO will be placed for AMC after completion of defects liability period.

3.8.2 The Bidder will have to depute his engineer for preventive check of the system atleast once in a month during AMC/as and when required for attending defects/problems communicated.

3.9 Bank Guarantee for AMC

Vendor shall furnish separate Bank Guarantee (BG) equivalent to the rate quoted for 3 years Annual Maintenance Contract. This BG shall be submitted 2 months before the expiry of defects liability period failing which the Performance Bank Guarantee shall stand forfeited. BG for AMC shall be valid for 39 months from the date of expiry of Defects liability period.

3.10 Payment Terms:

Payment shall be made after the successful installation, Testing and Commissioning of the system.

3.11 Office Reserves the right to make any modifications in the scope and conditions of tender before 1st May 2018. Vendors are required to view our Web site viz., www.agae.tn.nic.in for any updation in this regard before site inspection.

3.12 Bids to be forwarded in sealed envelope superscribed as “TENDER FOR ACCESS CONTROL SYSTEM” and addressed to

Shri. V. Karthikeyan, IA &AS
Sr.Deputy Accountant General(Admn)
Office of the Accountant General(A&E), Tamilnadu
361 Anna Salai, Chennai – 600 018

3.13 **Site Inspection dates:** 03/05/2018 – Tuesday. Office will arrange a meeting with the vendors in the afternoon.

3.14 **Late date for submission of bids :** 09/05/2018 by 5.00pm

Chapter IV – Specifications & Allied Technical details

Technical Specifications for Thin Proximity Cards

S.No	Parameter	Requirement
1	Material	Thin, Flexible polyvinyl chloride (PVC) laminate
2	Working Frequency	125KHz
3	Maximum Read Range	2-15cm
4	Dimensions	54W x 86L x 0,76H mm
5	Operating temperature	-45°C to 70°
6	Weight	10 gram

Technical Specifications for Flap Barrier- Dual

S.No	Parameter	Requirement
1	Power requirements	200 ~ 240V, 50/60Hz
2	Working temperature	-28°C~60°C
3	Working humidity	5%~80%
4	Working environment	Indoor/outdoor (if sheltered)
5	Speed of throughput	RFID-Maximum 42/ minute
		Fingerprint-Maximum 35/ minute
		Face - Maximum 11/ minute
		Vein-Maximum 23/ minute
9	Lane width(mm)	600
10	Footprint(mm*mm)	840*870
11	Dimensions(mm)	L=870,W=300,H=1000
12	Dimension with packing(mm)	L=1000,W=430,H=1110
13	Net weight(kg)	58
14	Weight with packing(kg)	81
15	LED indicator	YES
16	Cabinet material	SUS304 Stainless Steel
17	Lid material	SUS304 Stainless Steel
18	Barrier material	Acrylicl
19	Barrier movement	Retracting
20	Emergency mode	YES
21	Security level	Medium
22	MCBF	2 million

Variation of 10% in dimension is acceptable

Technical Specifications for Hand Metal Detector

S.No	Parameter	Requirement
1	Dimension	410(L) X 85(W) X 45(H) mm
2	Power voltage	standard 9V battery
3	Operating voltage	7V-9V
4	Operating Current	<50mA
5	Alarm terms	sound (vibration) and light alarm simultaneously
6	Waterproof	IP31
7	Alarm Sound	≥75dB(A)
8	Operation Frequency	40KHz

Technical Specifications for Walk Through Metal Detector

S.No	Parameter	Requirement
1	Power supply	AC100 V-240 V
2	Working temperature	-20°C~+50°C
3	Working frequency	4KHz—8KHz
4	Standard external size	2200mm(H)X800mm(W)X580mm(D)
5	Standard internal size	2010mm(H)X700mm(W)X500mm(D)
6	Zone	6 Zone
7	Indications	Synchronous Sound and LED alarm
8	Gross weight	70kg

Variation of 10% in dimension is acceptable

Technical Specifications for RFID & FP Reader

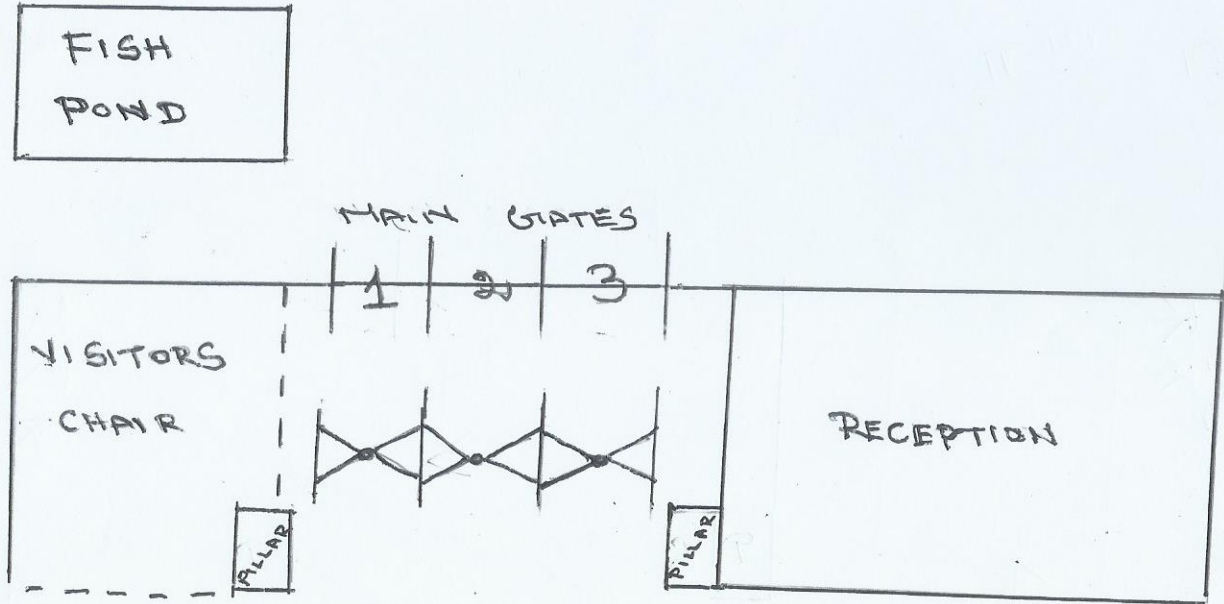
S.No	Parameter	Requirement
1	Users Capacity	10,000
2	Fingerprint Capacity	5000 Templates
3	Card Capacity	10,000
4	Transaction Capacity	100,000 Transactions
5	Sensor	Optical Sensor
6	Algorithm Version	Finger V9.0&10.0
7	Communication	RS232/485, TCP/IP, USB-host
8	Access Control Interface	3rd Party Electric Lock, Door Sensor, Exit Button, Alarm, Doorbell
9	Wiegand Signal	Input and Output
10	Display	TFT LCD Color Screen
11	Interface Styles	Common, Matrix and Magic styles
12	Standard Function	Webserver, Anti-passback
13	Optional Function	Mifare Card, HID Prox
14	Power Supply	12V DC,3A
15	Operating Temperature	0 °C- 45 °C
16	Operating Humidity	20%-80%
17	Dimension(WxDxH)	80×183×42mm

Technical Specifications for Tripod Turnstile

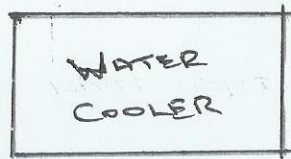
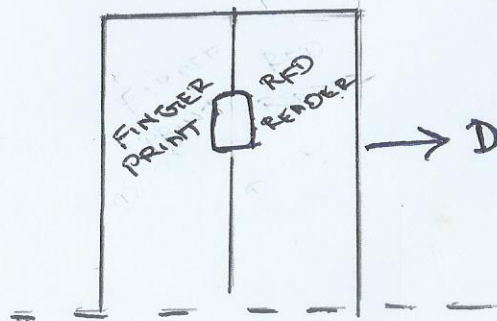
S.No	Parameter	Requirement
1	Power Supply	AC 220V/110V, 50/60Hz
2	Operating Temperature	-28 °C- 60 °C
3	Operating Humidity	5%-85%
4	Working Environment	Indoor/Outdoor(shelter)
5	Rated Power	60W
6	Flow Rate	25- 48 passage/minute
7	Ingress Protection	IP54
8	Casework Material	SUS304
9	Pictogram Indication	Yes
10	Control System	Input controlled by dry contact
11	Emergency Button Input	Yes
12	Dimension	111×133×26(CM) + arm length 50CM
13	Package Dimension	120×108×38(CM)
14	Net Weight	51KG
15	Gross Weight with Package	59KG
16	Optional Function	Alternative Material or shape, third-party access control integration, ticket system integration, passage counter

Variation of 10% in dimension is acceptable

LOCATION A



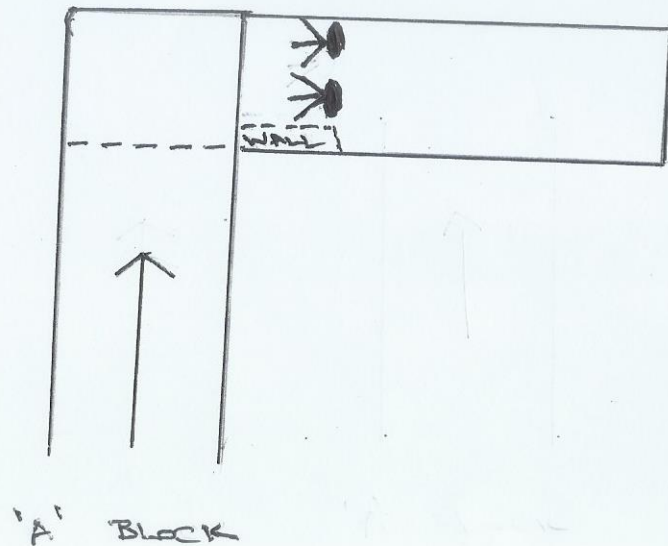
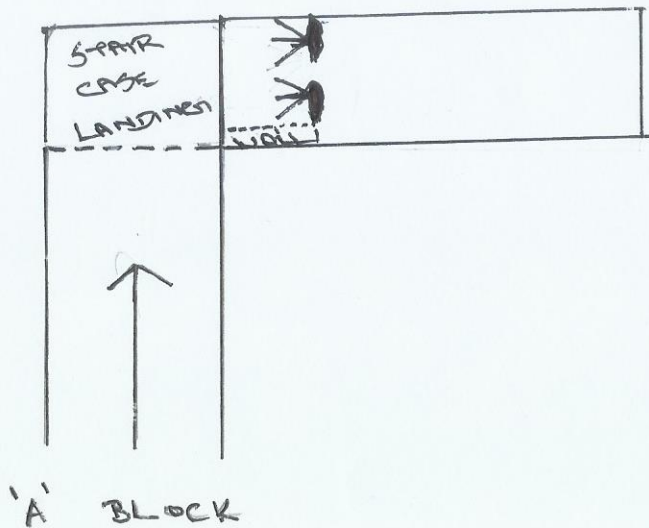
LOCATION B



LOCATION C

IST FLOOR

IIND FLOOR



Chapter V – Price Schedule

S.No	Item Description	Quantity	Rates in Rs.
1	Waist high flap barrier turnstile – dual	3	
2	Waist high tripod turnstile	4	
3	Hand Metal Detector	2	
4	Walk through Metal Detector	1	
5	RFID & Finger Print reader	16	
6	RFID writer	1	
7	Thin proximity cards (quote for 1000 cards)		
8	Cost of Installation, cabling, commissioning, establishment of connectivity between turnstile, bio-metric devices, LAN port and server		
9	Charges for Annual Maintenance Contract post warranty period a. Comprehensive b. Semi-comprehensive		
10	Any other charges may be specified		

Note: Taxes may be quoted separately for each item