



(Premises & Estate Deptt.)
SBI LHO, Sector -17B, Chandigarh - 160017

NOTICE FOR INVITING TENDER OF APPROVED EMPANELLED FOR RATE CONTRACT BASIS FOR SUPPLY, INSTALLATION, COMMISSIONING AND MAINTENANCE OF AUTOMATIC FIRE DETECTION & ALARM SYSTEM (AFD&AS) AT BANK BRANCHES/ OFFICES LOCATED IN THE STATE OF PUNJAB, HARYANA, HIMACHAL PRADESH, AND UT OF CHANDIGARH, LADAKH AND JAMMU & KASHMIR IN THE CHANDIGARH CIRCLE

TO BE SUBMITTED
ON OR BEFORE UP TO 1500 HRS ON **14.08.2023**

ADDRESS FOR COMMUNICATION
Asst General Manager (P & E),
State Bank of India, Local Head Office
Ground Floor, Sector – 17B, Chandigarh –
160017, Tel.0172-4567015
E mail – agmpre.lhochasbi.co.in

Name of the Vender: -

Address :-.....

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Contact:-.....

A. GENERAL:

1.	Name of the work	Supply, Installation, Testing, Commissioning, Repair & Maintenance (including maintenance of existing AFD&ASs) of Automatic Fire Detection & Alarm System at the branches / offices of State Bank of India located in Rural, Semi-Urban and Urban Areas of the State of Haryana, Punjab, Himachal Pradesh, and UT of Chandigarh, Ladakh and Jammu & Kashmir in the Chandigarh Circle
2.	application / document.	EOI document may be downloaded from the bank's web site https://.sbi.co.in under link of "PROCUREMENT NEWS" or can be collected in person from the above address without any cost on all working days between 11.00 hrs to 16.00 hrs.
3.	Time and last date of Submission of Application	on or before 14.08.2023 up to 1500 hrs.
4	Pre-bid meeting (Tentative date)	07.08.2023 at 3.00 PM Address: - Asst General Manager, Premises & Estate Department, State Bank of India, Local Head Office, Ground Floor, Sector -17B, Chandigarh -160017
5	Contact details of Officials concerned for any clarification	AGM (P&E): 0172-4567103 Email-id: agmpre.lhocha@sbi.co.in Fire Officer: 0172- 4567015 Email-id: fo.lhocha@sbi.co.in
6.	Place & Address for submission of application / contact person / telephone no.	Asst General Manager, Premises & Estate Department, State Bank of India, Local Head Office, Ground Floor, Sector -17B, Chandigarh -160017 Tel Ph: - (0172) – 4567015
7.	Date, Time, and Place of opening of application	14.08.2023 by 1600 hrs., in the office of Asst. General Manager (P & E), State Bank of India, Premises & Estate Department, Local Head Office, Ground Floor, Sector – 17B, Chandigarh -160017 <u>Note: - In case the date of opening is declared as a holiday, the application will be opened on the next working day at the same time.</u>
9.	Terms of payment of Bills	After the completion of the work and no advance payment will be made by the Bank.

10.	Electronic Payment	Electronic payment shall be preferred.
11	EMD & Security Deposit	The bidder shall deposit an EMD for an amount Rs.50,000/- in the form of Demand Draft / Banker's cheque in favour of State Bank of India, LHO, Chandigarh, payable at Chandigarh before last date submission of tender. (Tender application without EMD will not be considered)

INSTRUCTIONS TO THE APPLICANTS

The EMD shall be forfeited if:

- i. A Vendor/Bidder withdraws the offer during the period of validity of the bid/contract.
- ii. The successful Vendor/Bidder fails to execute the work satisfactorily within the stipulated time schedule. Bank's decision in the above cases will be final.

No interest shall be paid on the EMD deposited by the tenderer. EMD of the successful bidder shall be refunded after the successful completion of the work tenure, whereas EMD of the unsuccessful bidders will be refunded on completion of Bid/Tender process. The EMD of the successful Bidder shall be retained as Security Deposit and payable at the end of the Contract Period.

- 1) Intending applicants are required to submit their applications with full biodata giving details about their organization, experience, technical personnel in their organization, competence, and adequate evidence of their financial standing etc. in the enclosed form which will be kept confidential.
- 2) The Firms/Organizations, great emphasis will be laid on the ability and competence of applicants to do good quality works within the specified time schedule and in close co-ordination with Bank as well as other related agencies.
- 3) Decision of the Bank regarding selection of Firms / Organizations will be final. The Bank is not bound to assign any reason for acceptance / rejection of any applications.
- 4) Each page of the application will be signed and stamped. The application shall be signed by persons/ persons on behalf of the organization having necessary authorization/ Power of Attorney to do so (Certified copies to be enclosed).
- 5) If the space in the Performa is insufficient for furnishing full details, such information may be supplemented on separate sheets of paper, stating therein the part of the Performa and serial number. **Separate sheets shall be used for each part. However, the format shall be strictly as per Performa.**
- 6) Applications containing false, incomplete and/or inadequate information are liable to be rejected. Also, mere fulfillment of eligibility criteria does not guarantee selection.
- 7) Canvassing in any form in connection with selection is strictly prohibited and the application of such persons / organizations will be liable to rejection.

- 8) Bank reserves its right to reject any / all the applications without assigning any reasons, whatsoever, therefore. Incomplete / partly filled applications without relevant enclosures may not be considered for evaluation and would be rejected.
- 9) Disputes, if any, regarding the tender shall be within the jurisdiction of Court in Chandigarh.
- 10) Bank is not responsible for the late receipt/ non receipt due to postal delay, strikes or any other reasons. The applications received on the given date and time will only be taken up for further evaluation.
- 11) ***The agencies / firms / manufacturers shall not use logo and name of the State Bank of India on their letter head, sign board and rubber stamp etc.***
- 12) Bank reserves the right to purchase the equipment's/ systems through **GeM portal** of Govt. of India and provide the same to the firm/ vendor for installation and commissioning in the required branch. However, cost of any material / component provided by the firm for installation and commissioning of the system/ equipment would be paid as per approved / prevalent market rates, including installation charges.

B. ELIGIBILITY CRITERIA:

Registration Requirements:

- a) Must have valid PAN, GSTs, ESI & EPF Registration Number etc. These certificates must be enclosed with tender documents.
- b) **Statutory Provisions:** Manufacturers/ Firms/ Companies/ Dealers/ Vendors should comply with all the labour laws, Rules, Regulation of concerned States and Central Government.
- c) **If Firm does not have offices, then it must give undertaking on Rs.10/- stamp paper that they will setup offices as per Sr. No. 3 (a) locations within 3 months of finalization of tender.**

2. Authorization Letter:

- a) The applicant should submit the authorization Letter from the Principals / OEMs (Original Equipment Manufacturer) / Distributors whose products are proposed.
- b) The Applicant should either be the original equipment manufacturer of the proposed system or a subsidiary company of a manufacturer company for such system or an authorized supplier / channel partner of a manufacturer / System Integrator, of the proposed system.
- c) State Bank of India reserves the right to visit/inspect Applicant/Manufacturer facilities to ascertain the above facts. The Bank's representatives may visit the applicant's factory site/offices and contact his past clients for verification of information given by the applicant. The applicant will be required to give/arrange the necessary facilities for any such verification process.

3. Service Support Office:

- a) The applicant must have ***an established office / service centre with adequate technical personnel at least at two locations in the state of Haryana, Punjab, Himachal Pradesh and UT of Chandigarh, Ladakh and one Jammu & Kashmir. This office/service centre should have been operational***, the applicants also must be prepared to open additional support offices at new centers where Admin Offices are located from the perspective of providing 24 hours / 7 days, post implementation support.
- b) Complete address, contacts and Documentary evidence for the same needs to be provided.
- c) **The contact details, especially the Telephone numbers, of service centers should remain unchanged during the currency of vendor's relation/agreement with SBI, Chandigarh Circle.**

4. **Product Literatures:**

- a) Applicant shall furnish as a part of bid, documents establishing the applicant's ability to execute the work.
- b) The applicant shall also submit documentary evidence in the form of literature, drawing & data on the AFD&AS Product offered.
- c) Evaluation will be done on the basis of the documents submitted along with the bid without any further reference to the applicant.

Note: The interested firm are advised to keep on visiting Bank website <https://.sbi.co.in> for any subsequent changes/corrigendum/additions/updates etc., for which there would be no press notifications.

SCOPE OF WORK

1. Supply, installation, commissioning, and maintenance of Automatic Fire Detection & Alarm System (AFD&AS) including maintenance of existing AFD&AS for its Branches/ Offices/ Cells located at rural, semi-rural and Urban areas in the State of Haryana, Punjab, Himachal Pradesh, and UT of Chandigarh, Ladakh and one Jammu & Kashmir, **as and when required** in accordance with technical specification as Annexure -I.
2. **Contract Period:** The rate contract shall be valid for a period of **One Year** from the date of awarding the contract, subject to review yearly, based on satisfactory performance of the firms/vendor. The rate contract may further extend as deemed necessary by the Bank on the existing rate, terms, and conditions.
3. **Allotment of work:** It will be mandatory to accept work of Regions comprising of urban, Semi-urban as well as rural branches and vendor should be willing to take up work of supply and maintenance together. Bank has a right to allot the work for any area/region/AO to any of the successful vendor without giving priority to L1 or any other vendor.
4. **Since, the number of branches/Offices in the Chandigarh Circle are approximate 2065 and it is beyond the capability of one firm/ Vendor to carry out the work as per schedule.**

State Bank of India Chandigarh Circle				
Sr. No	State /UT	AO's	Total Branches	Area Category
1.	Punjab	Mohali	312	Plain Area
		Ludhiana	320	Plain Area
		Bathinda	312	Plain Area
2.	Haryana	Panchkula	251	Plain Area
		Rohtak	283	Plain Area
3.	Himachal Pradesh	Shimla	368	Hilly Area
4.	Jammu & Kashmir	Jammu	208	Hilly Area & Plain Area
5	Chandigarh	LHO	08	Plain Area

5. **Since, the number of branches/Offices in the circle are approximate 2065 and it is beyond the capability of one firm/ Vendor to carry out the work as per schedule. In view of the above the work shall be distributed amongst the Firms/Vendors at L-1 rates in the ratio of L1- 24 %, L2- 21 %, L3- 18%, L4-15 %, L5 – 12 % and L6- 10 % provided Firms at L-2, L-3 and so on are willing to accept L-1 rates. In case L-2 is not willing to accept work at L-1 rates, other firms L-3/L-4 and so on in that manner may be awarded work. If number of eligible vendors is less than 6, the work will be distributed among all successful vendors as per the ratio mentioned**

above and remaining work will be further divided equally to all successful vendors. For easy monitoring, effective control, easy follow up without spillover of Branches to other zones, zone/ RBO or part wise allotment shall be considered.

6. The work under this section shall consist of furnishing all labour, material, equipment, and appliances necessary and required to completely install automatic and manual fire detection and alarm system facility as required by the drawings and specified here in after or given in the schedule of quantities.
7. The following procedure of work is to be followed for supply, installation, testing & commissioning of Automatic Fire Detection & Alarm System (including maintenance of existing systems) in the Branches / Offices/ Cells of the Circle:
 - a) The firm(s) will contact the concerned officer of AOs / RBOs / Bank Officers of respective AOs / RBOs and obtain the list of the Branches / Offices/ Cells.
 - b) The Supply, Installation & Maintenance will be carried out by the firm during any working day as per schedule, before or by the date or as and when ordered by branches on requirement basis. The installation of Automatic Fire Detection & Alarm Systems should be carried out under the supervision of Branch Manager or Nominated official of the Branch by the Branch Manager.
 - c) Supplying, Installation, Testing, Commissioning, (SITC) of the Automatic Fire Detection & Alarm System should be done as per Bank's technical specifications.
 - d) The work for new installation shall be completed by the Firm within **30 DAYS** from the date of receipt of the work order.
 - e) The maintenance should be done in the presence of the Branch Manager or some other official of the Bank authorized by the Branch Manager. The engineer/ technician, who should have company's Authority Letter and Identity Card should give demonstration/training to all authorised staff members during the visit.
 - f) Firm to complete the Supply, Installation work and get Installation/ Maintenance Certificate signed from the Branch Manager in addition to the Firms service certificate.
 - g) The Firm shall submit bills supported by Installation/ Maintenance Certificate, Tax Challan etc. to the concerned Branch / CM (CS) for payment.
 - h) The visiting mechanic / technician of the firm who should be in possession of identity card and authority letter, shall carry out the Periodic Inspection/ maintenance of Fire Alarm system. The following procedure shall be followed for maintenance:
 - I. **Mandatory AMC Visits:** Four visits in a year (Once in three months).
 - II. Checking & testing the operation state of panel(s) in normal and during power supply failure, testing of battery for charged condition and removal of any defect, if found.
 - III. Performance of external hooters, visual alarm of panel(s), manual call points and response indicators should be checked.
 - IV. Cleaning and testing of each and every detector at all the floors. Servicing and testing of manual call points for each zone.
 - V. Performance of auto dialer should be tested and rectify the defect if any. Ensuring that the latest contact of Branch Manager/ Branch official(s)/ Local Police Station/ Fire Brigade are fed in the system.
 - VI. Checking of open & short circuit conditions resulting in a faulty alarm indicating in the panel.

- VII. Ensuring the required power supply (AC/DC) is always exist to the system.
Checking up all the wiring.
- VIII. Lamp(s) testing to be carried out of panel(s).
- i) The above all checking, and testing should be carried out by qualified technicians/engineers only. Security registers should be maintained.
- j) In case of any breakdown (minor/major) qualified technical/engineer should be deputed by the firm for repairing the system, on receipt of information from the branches/RBO/AO the firm shall respond maximum **within 2 working days**. The repairs/servicing of the system/equipment's shall be done as per the guidelines of the respective manuals of the manufacturers. **In case the system requires major repairs, the Firm shall provide a replacement before taking the defective system for repairs.**
- k) Any damage caused to the existing structure, wiring, other devices / equipment during installation shall have to be made good by the Firm at its own expense, failing which the Bank will be free to do the needful to restore the status-quo-ante at the risk and cost of the vendor and shall recover the cost for such rectification from the Firm's final bill or EMD as deemed fit.
- l) While carrying out wiring, it should be ensured that adequate flexibility is available in the wiring to allow the renovation work on the floor, whenever required. Required margins from the ceiling on each floor to allow renovation work, whenever required, will have to be catered while executing the installation with consultation with Branch Manager/ Electrical Engineer.
- m) All cables / wires, detector, hooters etc. should be properly anchored / fixed. The wiring for the system should be so spaced to cause no electrical interference in the system. This aspect shall be tested and confirmed by the Firm during the progress of the work.
- n) A sample of all the cables, detectors, hooters etc. used should be provided by the Firm to the Branch Manager and Security Officer at AO/ Fire Officer for verification and comparison purpose.
- o) The Firm shall ensure that the work is carried out neatly and Bank's ambience is not disturbed. The Firm shall also ensure that there should be no damage to Bank's property/or any decorative structure, while carrying out the work. The Firm will rectify the damages at his own cost.
- p) The Firm will ensure that whenever the work is to be carried out in the working hours, the entire work involved shall be carried out with least disturbance. All dismantling work and work generating noise shall be done after office hours and holidays and day-time work shall have to be done in restricted hours, after obtaining written permission from the Branch Manager.
- q) The debris/ dust or any wastage generated out of the above work shall be cleaned as frequently as required and as instructed by the Branch Manager.
- r) The Firm shall make adequate arrangement for watch and ward of his material and shall ensure the safety, breakage and any theft of material fixed or unfixed by him.
- s) The work executed/ equipment supplied should be inspected by the authorized Official and the Firm shall rectify any bad workmanship/defect pointed out at any stage and rectify the same.
- t) The Firm shall be responsible for the application of labour laws, all other social security enactments applicable to such works and workmen and compensation for injury and accident to person, if any, whether such injured person is employed by it.

- u) The statutory deductions like income tax and any other taxes as applicable shall be deducted at source from each payment of the Firm.
- v) The Bank will be within its right to ask for the testing of item(s) supplied/material used from the competent/approved agency. The cost of testing will have to be borne by the Firm.
- w) The dealership of the Firm shall not be allowed to be discontinued by the principal manufacturer during the contract period. The Bank will be free to forfeit the security deposit of the Firm, in case dealership of Firm is cancelled by the principal manufacturer during the contract due to any reason.

7. Warranty period: For new supply of the Fire Alarm System, It shall be **12 calendar months** from the date of handing over after completion of work.

7.1 The right to make any changes in the specifications of equipment or terms of the contract is solely vested with this office. The authority to penalize the Firm(s) is vested with this office/ Administrative Office upon receipt of recommendations duly supported by documents, from the Administrative Offices.

7.2 The branch shall extend all co-operations to facilitate the smooth execution of this contract. Any work which is not in the scope of this, if deemed necessary by the branch, may be arranged by the branch at its own cost. Any difficulty faced by the Firm in execution of this contract shall be brought to the notice of Security Officer of the concerned AO/RBO without any delay.

8. PAYMENTS AND DEDUCTIONS

- a) No advance payment will be made by the Bank. Payment will be made against supply and installation of system only.
- b) Payment will be made on satisfactory completion of work by respective RBOs on centralized basis for all branches under RBO/concerned branch, on production of Quarterly Service Report Bills / new work bill(s) supported work order/ installation certificate after due scrutiny and verification.**

9. PERFORMANCE GUARANTEE DEPOSIT & PENALTY:

- a) Performance Guarantee/ Security Deposit, deposited by the firm will be kept with the Bank, for the entire period of the contract.
- b) For delay beyond two working days of getting to attend the break down complaint during AMC, penalty at the rate of Rs. 50/- per day to a maximum of 10% of the total AMC value shall be imposed. This amount shall deduct from the AMC bill or Security deposit as deemed fit.
- c) For delay beyond 30 days of getting the work order for new installation, penalty, at the rate of Rs. 100/- per day to a maximum of 10% of the total value of the work order shall be imposed as liquidated damage (LD) for the delay period. This amount shall deduct from the final bill or Security Deposit as deemed fit.
- d) In case of supply of substandard materials. The acts, contrary to the laid down norms, or on detection of any tendency to cheat the Bank, the contract to the Firm will be cancelled without prior notice and the firm will be delisted/ blacklisted from the Bank.

- e) **All complaints are to be attended within the following time frame under AMC from the date/time of lodging complaint/request:**

Urban – upto 24 hours

Sub urban/ Rural Area - maximum 2 working days.

GENERAL TERMS AND CONDITIONS

1. Bank reserves the right to purchase the equipment's/ items through **GeM portal** of Govt. of India directly and provide the same to the firm/ vendor for installation and commissioning in the required branch. However, cost of any material / component provided by the firm for installation and commissioning of the system/ equipment would be paid as per approved / prevalent market rates, including installation charges.
2. **Indemnity:** The selected bidder shall indemnify, protect and save the Bank against all claims, losses, costs, damages, expenses, action suits and other proceedings, resulting from infringement of any law pertaining to labour act, minimum wages act, engaging the manpower laws etc.

Selected Bidder shall keep the Bank, its Successors, Assignees and Administrators fully indemnified and harmless against loss or liability, claims actions or proceedings, if any, that may arise from whatsoever nature caused to the Bank through the action of its employees, agents, contractors, subcontractors etc.

The indemnification is only a remedy for the Bank. The Selected Bidder is not absolved from its responsibility of complying with the statutory obligations as specified above. Indemnity would be limited to court awarded damages and shall exclude indirect, consequential, and incidental damages. However, indemnity would cover damages, loss or liabilities suffered by the Bank arising out of claims made by its customers and/or regulatory authorities.

However, the Selected Bidder would be given an opportunity to be heard by the Bank prior to making decision in respect of such loss or damage.

3. **Liability of the Selected Bidder: Bank shall hold the selected bidder, its Successors, Assignees and Administrators fully liable against loss or liability, claims, actions or proceedings, arising out of non- fulfilment of any obligations under the Contract.**

Selected Bidder shall be the principal employer of the employees, agents, contractors, subcontractors etc. engaged by the firm and shall be vicariously liable for all the acts, deeds or things done by its employees, agents, contractors, sub-contractors etc., whether the same is within the scope of power or outside the scope of power, vested or instructions issued by the Bank under the Contract to be issued for this Tender Document. Such liability of the Selected Bidder will be restricted to the actual amount of the Contract.

"Notwithstanding anything to the contrary elsewhere contained in this or any other contract between the parties, neither party shall, in any event, be liable for any indirect, special, punitive, exemplary, speculative or consequential damages, including but not limited to loss of income or profits."

4. **Negligence by the Bidder:** In connection with the work or contravening to the provisions of General Terms, if the selected bidder neglects to execute the work with due diligence or expedition or refuses or neglects to comply with any reasonable

order given to him in writing by the Bank, in such eventuality, the Bank may after giving notice in writing to the selected bidder calling upon him to make good the failure, neglect or contravention complained of, within such time as may be deemed reasonable and in default of the said notice, the Bank shall have the right to cancel the Contract holding the selected bidder liable for the damages that the Bank may sustain in this behalf.

5. Obligations of the Bidder: The Bidder is responsible for managing the activities of its personnel and will hold itself responsible for any misdemeanors.

6. Products Certifications:

The components of the AFD&AS proposed to be installed by the applicant should bear certification by one of the standards as listed against each item below i.e. UL (Underwriters Laboratories Inc), BS ("British Standard"), FM ("Factory Mutual"), BIS (Bureau of Indian Standards), LPCB (Loss Prevention Control Board) ERTL (Electronic Research & Testing Laboratory) / ETDC (Electronics Testing and Development Center).

A copy of relevant certification needs to be enclosed.

S. No	Product	Standard
i.	Detector	UL/FM/ BS /LPCB/BIS
ii.	Armored Cable (Copper)	BIS-1554 Part-1/1976 (ISI-Marked)
iii.	Panel	Standard. Type Tested by ERTL/ ETDC
iv.	Electronic Hooter	Standard. Type Tested by ERTL/ ETDC
v.	Response Indicator	Standard. Type Tested by ERTL/ ETDC
vi.	Manual Call Point	Standard. Type Tested by ERTL/ ETDC

7. Authorization Letter:

- a) The applicant should submit the authorization Letter from the Principals / OEMs (Original Equipment Manufacturer) / Distributors whose products are proposed.
- b) The Applicant should either be the original equipment manufacturer of the proposed system or a subsidiary company of a manufacturer company for such system or an authorized supplier / channel partner of a manufacturer / System Integrator, of the proposed system.
- c) The Applicant shall have back-to-back agreement with each of the equipment Manufacturer, so that direct support for maintenance, spares and upgrades is available for at least 5 years from the date of installation of the system.**
- d) State Bank of India reserves the right to visit/inspect Applicant/Manufacturer facilities to ascertain the above facts. The Bank's representatives may visit the applicant's factory site/offices and contact his past clients for verification of information given by the applicant. The applicant will be required to give/arrange the necessary facilities for any such verification process.

8. Service Support Office:

- a) The applicant must have ***an established office / service centre with adequate technical personnel at least at one location in the state of Punjab, Haryana, Himachal Pradesh and UT of Chandigarh, Jammu & Kashmir and Leh – Ladakh . This office/service centre should have been operational,*** the applicants also must be prepared to open additional support offices at new centers where Admin Offices are located from the perspective of providing 24 hours / 7 days, post implementation support.
- b) Complete address, contacts, and Documentary evidence for the same needs to be provided.
- c) **The contact details, especially the Telephone numbers, of service centers should remain unchanged during the currency of vendor's relation/agreement with SBI, Chandigarh Circle.**

6.6 Product Literatures:

- a) Applicant shall furnish as a part of bid, documents establishing the applicant's ability to execute the work.
- b) The applicant shall also submit documentary evidence in the form of literature, drawing & data on the AFD&AS Product offered.
- c) Evaluation will be done based on the documents submitted along with the bid without any further reference to the applicant.

6.7 The intending Manufacturer / Firm / Company / Dealer / Vendor who are under arbitration / litigation with our Bank in last five Years or have been blacklisted / de-listed / de-paneled by any Government / Semi Government / Nationalized Public Sector Banks / Public Sector Undertaking (PSUs) / Financial Institutes (FIs) / Corporate Offices will not be considered for tender. A valid AFFIDAVIT, on a Stamp Paper duly attested by Notary / Magistrate, to be submitted to this effect along with the application. Application received without the affidavit will be summarily rejected.

6.8 Other Terms & Conditions:

- a) In case of a serious lapses or non-fulfillment of any terms & conditions, the contract is liable to be canceled with forfeiture of the 'security deposit'. Beside this Bank may take suitable action as deemed necessary.
- b) The Bank reserves the right through the P&E Department to make changes in method and specifications of work within the overall framework of the terms and the basket of products.
- c) The Bank also reserves the right to seek downward revision of prices after the initial fixed rate period, if it finds that the prices have fallen 30% or more of the equipment being supplied.
- d) All components/sub-assemblies/spares used shall be as per the Technical Specifications approved by the Bank.
- e) The Bank, through its Fire Officer reserves the right and the vendor shall arrange to have a functional/performance test of any equipment carried out to verify the

performance parameters of the equipment. In case of any deficiencies observed the contractor concerned shall be responsible for rectification of the equipment at his cost.

- f) The responsibility for maintaining the Automatic Fire Detection & Alarm System (AFD&AS) during the currency of Warranty and AMC would be that of the concerned contractor who has to diarize the schedule and ensure that the needful is done on or before the due date, but not more than 10 days before the due date.
- g) The equipment shall not have been manufactured more than **6 months prior** to the date of installation.
- h) **Warranty period:** For new supply of Automatic Fire Detection & Alarm System (AFD&AS), It shall be **12 calendar months** from the date of installation against any manufacturing defects.
- i) Any liability arising out of any litigation (including those in consumer courts) due to any act or omission of the Vendor shall be directly borne by the Vendor including all expenses/fines. If any money shall, as the result of any instructions from the Labour Authorities or claim or application made under any of the Labour laws, or Regulations, be directed to be paid by the Bank, such money shall be deemed to be payable by the Vendor. Any liability arising out of any litigation (including those in consumer courts) due to any act or omission of the Vendor shall be directly borne by the Vendor including all expenses/fines. If any money shall, as the result of any instructions from the Labour Authorities or claim or application made under any of the Labour laws, or Regulations, be directed to be paid by the Bank, such money shall be deemed to be payable by the Vendor to the Bank within seven days. The State Bank of India, without prejudice to other rights/remedies available to the Bank, shall be entitled to recover the amount from the Vendor by deduction from money due to the Vendor or from the security deposit money.
- j) The State Bank of India, without prejudice to other rights/remedies available to the Bank, shall be entitled to recover the amount of penalty or otherwise from the Vendor by deduction from money due to the Vendor or from the security deposit money.

6.9 Compliance with Tax Laws: The Vendor shall ensure full compliance with tax laws of India regarding this contract and shall be solely responsible for the same. The Vendor shall keep the Bank fully indemnified against liability of tax, interest, penalty etc. of Vendor in respect thereof, which may arise.

6.10 Termination of the Contract: The Bank reserves its right to cancel the entire contract in whole or part at any time without assigning appropriate reasons in the event of one or more of the following conditions:

- a) Delay in completion of the work beyond the specified periods for reasons solely ascribed to the bidder.
- b) Serious discrepancies noted in the conduct of the work.
- c) Breaches in the terms and conditions of the contract.
- d) If the bidder fails to perform any other obligation(s) under this Tender/and subsequent agreement.
- e) During contract, if any of the Vendor are found to be indulging in corrupt practices causing any loss of revenue to the Bank, Bank shall be entitled to terminate the contract forthwith duly forfeiting the Vendor's Security deposit amount.

6.15 Effect of Termination: The Bank shall make such prorated payment for services rendered by the bidder and accepted by the Bank at the sole discretion of the Bank in the event of termination, provided that the bidder is in compliance with its obligations till such date. However, no payment for "costs incurred, or irrevocably committed to, up to the effective date of such termination" will be admissible. There shall be no termination compensation payable to the bidder. Termination shall not absolve the liability of the Bank to make payments of undisputed amounts to the bidder for services rendered till the effective date of termination. Termination shall be without prejudice to any other rights or remedies a party may be entitled to hereunder or at law and shall not affect any accrued rights or liabilities of either party nor the coming into force or continuation in force of any provision hereof which is expressly intended to come into force or continue in force on or after such termination.

6.16 Publicity: Any publicity by the selected bidder in which the name of the Bank is to be used should be one only with the explicit written permission of the Bank.

6.17 Inspection of Records: All bidder's records with respect to any matter covered by this Tender Document shall be made available to the Bank or its authorized officials at any time during normal business hours, as often as the Bank deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data. Said records are subject to examination

6.18 In case of any dispute, both the parties agree for sole arbitration. The said proceedings shall be conducted at Chandigarh and in accordance with the provisions of Indian Arbitration and Conciliation Act 1996 or any Amendments or Re-enactments thereto.

6.19 Disclaimer: The tender would bind neither the Bank in any contract nor in an offer of an assignment/contract. The Bank reserves the right to accept any bid/proposal or reject any or all the bids/ proposals received in response to the tender and to cancel the entire process at any time prior to award of the assignment/contract, without thereby incurring any liability to the affected respondent/s. The Bank shall not be bound to offer any reasons for such acceptance/ rejection nor shall entertain any correspondence with the rejected respondents in this matter. The Bank reserves the right to cancel the tender

process altogether at any time for any reason whatsoever. Purely as the discretion of the Bank.

6.20 The Firms shall not use logo and name of the State Bank of India on their letter head, sign board and rubber stamp etc.

6.21 Non-disclosure of Information: The Selected Bidder shall not, without the Bank's prior written consent, disclose any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Bank in connection therewith, to any person other than a person employed by the Bidder in the performance of the work assigned to them.

6.22 No Commitment to Accept any Bid: Bank shall be under no obligation to accept the lowest or any other offer received in response to this offer notice and shall be entitled to reject any or all offers without assigning any reason whatsoever. Bank has the right to re-issue tender/bid. Bank reserves the right to make any changes in the terms and conditions of Tender Document that will be informed to all bidders. Bank will not be obliged to meet and have discussions with any bidder, and/or to listen to any representations once their offer/bid is rejected. Any decision of Bank in this regard shall be final, conclusive and binding upon the bidder.

6.23 Signing of the Bid: The bid shall be signed by a person or persons duly authorized by the Bidder with signature duly attested. In the case of a body corporate, the bid shall be signed by the duly authorized officers and supported by internal corporate authorizations.

6.24 Exit Option: The Bank reserves the right to cancel the contract in the event of the failure of the bidder to agree on the terms of the contract within 30 days from the date of communication of award by the Bank and sharing of terms of contract by the Bank and subject to a cure period of 30 days. If the bidder does not meet these criteria, then the Bank may at its discretion declare the next best bidder as the successful bidder. The contractor will have an option to exit from the contract if felt so, by serving a notice period of 90 days.

6.25 Force Majeure: In case either party is prevented from performing any of its obligations due to any cause beyond its control, including but not limited to act of God, fire, flood, explosion, war, action or request of governmental authority, systemic breakdown, failure of electricity supply, accident and labour trouble, the time for performance shall be extended until the operation or such cause has ceased, provided the party affected gives 10 days' notice to the other party of any such factors or inability to perform and resume performance as soon as such factors disappear or are circumvented. In case,

Force Majeure continues more than 30 days, both the parties should discuss to find out mutually agreeable solution to the problem. In case, it is decided to terminate the contract, the Bank shall be required to pay the bidder only such amounts as due to it on account of completed items. The bidder shall not be liable for any loss, damage or claims under this Agreement for termination due to Force Majeure clause.

6.26 Disqualification: Any form of canvassing/lobbying/influence/query regarding short-listing, status, etc.will be a disqualification.

ANNEXURE-I
GENERAL REQUIREMENTS AND MINIMUM TECHNICAL SPECIFICATIONS OF
AUTOMATIC FIRE DETECTION & ALARM SYSTEM (AFD&AS)

1. GENERAL:

The purpose of a fire detection and alarm system is to detect fire at the earliest practicable moment and to give an alarm so that appropriate action can be taken (e.g. evacuation of occupants, triggering of extinguishing processes etc.). An alarm system may be activated by automatic detection devices or by manual operation of manual call points.

The general principles given below are a guide to design and construction of fire detection and alarm systems. A fire detection and alarm system should:

- a) Detect quickly enough to fulfill its intended functions.
- b) Reliably transmit the detection signal.
- c) Translate this signal into a clear alarm indication that will attract the attention of the user in an immediate unmistakable way and indicate the location of fire and initiate operation of ancillary service, such as fire extinguishing system etc.
- d) Remain intensive to phenomena other than those which its function is to detect and
- e) Signal immediately and clearly any supervised fault that might jeopardize the correct performance of the system.

2. SMOKE DETECTORS:

2.1 IONISATION TYPE:

Ionization Detector should respond to visible as well as invisible smoke generated by shouldering or open fire. It shall basically consist of two ionization chambers containing American – 241 foils, an electronic circuit, connection contacts to the base an easy to clean protective housing. The detector shall also be compatible to work with heat and photo electronic (optical) smoke detectors and shall have interchangeable base. The detectors shall be UL/FM listed approved.

2.2 OPTICAL TYPE:

Optical smoke Detectors shall contain an emitter, a solid-state light emitting diode (LED) which, with its associated lens system, shall produce a hollow circular beam of light. A silicon photocell shall be positioned in the central dark area of the hollow beam, so that in the absence of smoke no light is received. When smoke enters the chamber a combination of reflection and deflection from smoke particles shall cause light from the beam to impinge on the photocell. The detector shall be listed with UL/FM approved.

3.0 HEAT DETECTORS:

The heat detectors shall be combined rate of rise cum Fixed temperature, Re-settable type preferably operating on twin thermistor principle where one thermistor is exposed and is therefore in good thermal contact with the surrounding air and responds quickly to changes in air temperature and the other is thermally insulated from the surrounding and responds less quickly resulting in

electrical imbalance. One fixed temperature setting the detector shall operate at 60°C. The sensitivity of the detector shall be as per the requirements of IS: 2175 for grade I Heat Detectors. The detectors shall be UL/FM listed approved.

4.0 MANUAL CALL POINT:

Each manual call point unit shall comprise of a push button of reputed make enclosed in an M.S./Cast Aluminum Box with provision for cable or conduit coupling/gland from top. The manual push button shall have the words prescribed in clear bold letters on facial window. **“In case of Fire Break Glass,”** installation of the manual push button shall be as per IS: 2189. The push button shall not be shrouded and the same shall be projecting out of the surface of the M.S. Box.

5.0 ELECTRONIC HOOTER (SOUNDER):

The dual tone electronic hooter shall be provided so that it gives discontinuous/intermittent audible alarm automatically whenever the automatic/manual detector operates and is distinct from the background noise in every part of the premises. The mode of the alarm sounders shall be quite distinct from any other sounder to be heard. All hooters shall produce a similar sound and shall maintain the same during their operation. Hooter shall be complete with electronic oscillation, magnetic coil (sound coil) and accessories ready for mounting (fixing) and conforming to IS: 2189-2008.

6.0 REMOTE RESPONSE INDICATOR:

The remote Response indicator shall consist of a steady glowing LED similar to the one provided at the base of the detector. This LED shall be mounted with in a M.S. box of 16 SWG and connected in parallel to the built-in indicator of the detector by a 2-core cable. The response indicator shall come “ON” as soon as the detector actuates. The M.S. enclosure shall be painted externally and internally in synthetic enamel paint of approved shade. The LED shall be so provided that it is visible from the side also.

7.0 MICROPROCESSOR BASED CONTROL PANEL:

7.1 Control panel shall conform to IS: 2189: 2008. The equipment for the main board shall be compact, neatly wired and completely of solid state design. The panel shall be of wall mounting type, totally enclosed, dust and vermin proof type made of 16 SWG dust inhibited MS Sheet of suitable size and having lockable glass front suitable to accommodate accessories as specified, with oven backed finish duly painted with one coat of anticorrosive paint and two coats of synthetic enamel paint. The primary function of control panel shall be to respond automatically to the operation of one or more detectors to give fire alarm and to indicate area (Zone) where the device(s) are activated. The operation of one or more detectors shall result in a simultaneous alarm by the following:

- a) The external alarm hooters at floor of actuation.
- b) A visible indication on control panel.
- c) Audible alarm on control panel itself (common to all zones).

7.2 The secondary function on the control panel shall be to indicate the faults within the system. An immediate fault warning shall be given by an audible and visual signal on the control panel. A fault warning shall be given in case of following occurrences:

- a) Failure or disconnection of normal power supply.
- b) Short – circuit or disconnection of the leads to trigger devices unless the fault conditions reproduce the effect of the operation of a triggered device.
- c) Removal of any triggered device of the plug-in type or disconnection from its transmitter or power supply.
- d) Short – circuit or disconnection of any of the leads to alarm sounders external to the control and indicating equipment.
- e) In addition to above, visual warning shall be given on control panel for failure or disconnection of standby power supply and rapture or disconnection of any fuse on the operation of any protective devices that would prevent a fire alarm being given. The healthiness of battery charging equipment shall be indicated by a charging meter and an LED.

7.3 The control panel shall drive 230 volts A.C. power from normal supply and the entire fire alarm & detection system shall be suitable for operation on 24 Volt D.C. A standby power supply shall be immediately available in the event of failure of normal supply and shall automatically be connected to maintain the equipment in condition such that fire alarm originating from the operation of detector in separate zone can be subsequently given suitable earthing shall also be provided to the satisfaction of the Engineer/consultant and bank.

8.0 ELECTRONIC CABLES, WIRING & CONDUITING:

- I. All wires / cables to be used for the system shall confirm to the following as specified in BOQ:
 - a) PVC insulated copper conductor cables confirming to and marked IS: 694: 1990 having minimum 1.5mm² cross- sectional areas or as specified in BOQ. If stranded at least 0.5mm² cross-sectional should be used.
 - b) Armored PVC / Rubber insulated cables confirming to and marked IS: 1554 (Part – I) 1988.
- II. Joints in the cables shall necessarily be avoided. Where joints are unavoidable for qualified reasons all visible areas of the junction boxes shall be painted signal red.
- III. The maximum number of wires that can be drawn in conduit shall be governed by the CPWD Specification for internal electrical works (Part-I).
- IV. Insulation on cable should not be lesser than one Mega Ohm when tested with a 500 Volts Megger for any section of the wiring.

9.0 INSTRUCTION MANUAL:

9.1 The record engineering drawings and operating instructions shall be supplied by the installers on completion of the installation. Drawings shall clearly indicate, for maintenance and record purposes, the position of various items of the equipment's, junction boxes, sizes and routes of all cables and wires and such other relevant details. If so desired by the user, circuit diagrams of fire alarm system and its components should also be supplied. These drawings and operating instructions shall be kept up – to – date and be available for convenient

reference and shall be available for convenient reference and should be located in the control room.

- 9.2 The installer shall supply the user with a log book. The log book shall be maintained for recording details, including causes of all the alarms (genuine, practice, test or false), faults, service tests and routine inspections, servicing/repairs, etc, as and when done. Periods of disconnection/in operation should also be shown.

10. REQUIREMENTS FOR DETECTION ZONES THAT CONTAIN NON-ADDRESSABLE AUTOMATIC DETECTION SYSTEM ARE GIVEN BELOW:

- a) Automatic fire detection and alarm system consists of fire detectors and manual call points connected by appropriate cables to sector/zonal panels which in turn are connected to control and indicating equipment (C and I). The equipment and cables of automatic fire detection and alarm system should be independent of any other system or cables, and should not be shared with any other system.
- b) If the requirement of detectors in any area is less than 20, division into zones/sectors may not be necessary. Similarly, sectorization may not be necessary if the number of zones is not very large and in case of bigger premises, the premises may be divided into wings and each wing may have sectors/zones.
- c) Size of the conventional panels is normally referred by number of zones. Each zone can be connected with the conventional detectors not exceeding 20.
- d) The floor area of a single zone shall not exceed 2000 m².
- e) If the total area of a building is less than 300 m², a zone can cover more than one floor.
- f) If the total area of a building is more than 300 m², each zone shall be restricted to a single floor.
- g) The search distance, that is, the distance that has to be travelled by anyone responding to a fire alarm signal after entry to the zone in order for the location of the fire to be determined visually, shall not exceed 30 m.
- h) Automatic fire detectors within any enclosed stairwell lift well or other enclosed shaft-like structures shall be considered as a separate zone.
- i) If manual call points are located on the landings of an enclosed staircase, such points at each level shall be incorporated within the zone that serves the adjacent accommodation on that level.
- j) The detectors and manual call points within sectors / zones shall be wired to the control and indicating equipment.
- k) The entire electrical installation pertaining to the entire fire alarm system as described above shall be independent of other systems.
- l) When a signal of fire is given it is necessary that there shall be no confusion about the zone from which it is received.

- m) In larger premises, the fire alarm system shall be so designed and arranged that it is fully compatible with the emergency procedures and provides at some central or convenient point, or points, an indication of the zone from which an alarm has originated.
- n) If the requirement of detectors or call points is less than 20 in any area, division of the area into zones is not necessary. Similarly, sectorization is not necessary if the number of zones is not very large.
- o) The zoning arrangement for systems in multiple occupations shall take into account the fact that all the premises may not be occupied at the same time. No zone shall include areas is more than one occupancy.
- p) Remote indicator lamps outside doors of rooms, cabins, etc, within a zone may be useful, if doors are likely to be locked.

11. THE FOLLOWING GUIDELINES TO BE FOLLOWED FOR THE INSTALLATION OF AUTOMATIC FIRE DETECTION & ALARM SYSTEM:

- a) The ***entire area of the branch including record/stationery room & onsite ATM enclosure should be covered*** with the detectors as per its requirement.
- b) The ***equipments and cables of Automatic Fire Detection & Alarm system (AFD&AS) should be independent of any other system*** or cables, and should not be shared with any other system.
- c) The electric ***connection shall be provided to the system before the main switch through MCB and UPS.***
- d) The ***control panel of the system should be installed near the entry/exit*** of the Branch / office. The control panel may be fixed on the wall at the height of 1.2 meter, it should be easily approachable, and a key of the control panel may also be tagged with panel.
- e) If the detectors are providing under/over the false ceiling, the ***armored cable / wire should be clipped / hooked with the roof. The armored cable / wire should not be laid out over the false ceiling at any cost.***
- f) ***Circuits for the detectors and the manual call points (MCP) shall be different. MCP shall be fixed at a height of 1.4 mete above the floor level,*** at easily accessible, well illuminated, and conspicuous positions, which are free of obstructions. It shall be located preferably near entry /exit / staircases.
- g) At the time of installation and prior to commissioning, ***every detector should be allotted an identification number*** (permanent marker) proceeded by alphabetic initials. For example, Z1/SDI/8 means zone -1, Ionization detector, 8th detector or Z2/SDO/5 means zone-2, optical detector, 5th detector or Z3/DHT/4 means zone-3, heat detector and 4th detector.
- h) Under the flat ceilings and ceiling height up 4/5 meter, the ***spacing between the detectors should not be more than 5 to 7 meter*** in a protected area.
- i) Detectors shall not mount within ***50cm of any walls, partitions or obstructions.***

- j) Detectors shall not be mounted within **01meter of any air inlet or a forced ventilation** system.
- k) Detectors should always be mounted on the ceiling only and shall be placed on the protected side of the premises on the ceiling **1.5 meter from any door, window or any opening** in the wall partitions.
- l) Detector sitting shall be such that a **clear space of 50cm is maintained below** each detector.
- m) Auto dialer should be **programmed with minimum 4/5 mobile numbers among the branch functionary including branch manager and must be armed 24x7hrs** with the fire alarm panel. The power supply of Auto dialer shall be given from fire control panel only.
- n) After installation of the system, a **demonstration regarding mode of operation of the system should be conducted in the branch/office before the branch functionary**. The function of automatic fire detection & alarm system along with auto dialer should be known to the users and the nearby fire station mobile number/phone number may also be connected with system. The fire station should also be informed regarding the function of captioned system in case of any emergency.

12. MINIMUM TECHNICAL SPECIFICATION FOR CONVENTIONAL AUTOMATIC FIRE DETECTION AND ALARM SYSTEM (AFD&AS)

Technical Specifications (Against Each Parameter)		Compliance Yes / No
1. MAIN CONTROL PANEL		
a) Primary Function	The primary function of the control panel shall be to automatically respond to the operation of one or more detectors to give fire alarm and to indicate area (zone) from where the devices are activated.	
b) Specifications	Minimum 04 – Zone Microprocessor based Control Panel as per IS-2199-2008 specifications. Approved / tested by ERTL/ ETDC or any Third-Party Laboratory/ Test House recognized by Bureau of Indian Standards for this purpose.	
c) Electrical\ Electronics	Built-in power supply arrangement with AC/DC ON, system ON visual indicators.	
	Automatic changeover arrangement to standby supply with built-in battery charger, low battery, charger fail, reverse polarity, AC/DC fail visual indicators.	

	Built-in panel sounder with Acknowledge switch, lamp test and reset switches, evacuation alarm.	
	Zone indicators for Fire, Open, Short, Isolate and Test Facility.	
	On fault i.e, open / short condition, buzzer must sound and indicator lamp (LED) glows. This audible alarm should be distinct from the Fire Alarm. <u>Trouble reminder</u>	
	Built-in Digital Ammeter, Digital Voltmeter, Air Conditioning turn-off relays and facilities for connecting Auto dialer etc.	
d) Auto Dialer	Arrange to Built in Auto Dialer Arrangement (GSM based compatible with 5G/4G network)	
e) Power Supply	The fire panel shall operate from a 230 v + / - 10 % 50 Hz mains supply and in case of power failure shall automatically switch over to a built-in sealed maintenance free battery rated at 24V DC 7 AH with a switch over time of less than 100 ms. <u>Deep discharge arrangement should be there.</u>	
f) Power Consumption	Less than 200 mA idle current and 1–2 Amps on full activation.	
g) AC Voltage at Input	Single Phase 50 Hz, 150-260 V. Auto cut-off protections for over and under current / voltage.	
h) DC Voltage for System	24 Volts	
i) Type of indicator lamps	LED (different colours)	
j) Body	Mild Steel (Minimum 16 SWG)	
k) Type	Wall mounting, plug in modular type.	
l) Overall dimensions	Suitable size to accommodate 4 zones, other control components, and 2x12V 7 AH battery.	
m) Thickness of body and colour	16 SWG. Powder coating (Preferably White / Brown colour)	
n) Opening of the body / panel	Suitable locking arrangement through Key/Allen Screws.	
o) Cable glands	Cable glands should be provided.	
Additional facilities: It should have the following additional facilities / provision:		

p) Auto dialer should be integrated within Main Control Panel	Should have capacity to register at least 5 (five) telephone numbers.	
2. BATTERY UNIT		
a) Make	Standard ISI make	
b) Type	Sealed, maintenance free.	
c) Voltage	12 Volts: 2 units.	
d) AH Capacity	7 AH capable of providing 48 hrs stand by supply in case of AC failure as per IS 2189-2008.	
e) Location	Both the batteries will be located within the Main Control Panel.	
3. MANUAL CALL POINT:		
a) Make as per BIS	As per IS 2189-2008. with hammer and chain	
b) Material of body	M.S., Powder coated with approved P.O red	
c) Thickness of body	1.5 mm.	
d) Material of fragile element	Glass of 2mm thickness	
e) Contact making breaking	Breaking for alarm	
f) Dimension	100mm x 100mm	
g) Size of fragile element	70mm x 70mm	
h) Type of indicator lamp	LED	
4. ELECTRONIC HOOTER/SOUNDER WITH FLASHER (OPTIONAL)		
a) Make	As per IS 2189-2008.	
b) Watt / capacity	6 Watts (Dual tone) of Min 65 db output	
c) Type of sound emitted	Intermittent / Dual	
d) Material of the body	Fabricated from either spun aluminum or moulded PVC.	
5. RESPONSE INDICATOR		
a) Make	As per IS 2189-2008 or equivalent as per prevalent trade and practice, acceptable to the Bank.	
b) Type of indicator lamps	LED	
c) Material of the body	Fabricated from either spun aluminum or moulded PVC or MS 16 SWG	
6. CABLE		
a) Make	Standard ISI mark	

b) Specification	IS 1554-Part-1 1976	
c) Type	2 core, 1.5 sq. Mm/core; Armoured Cable	
7. DETECTOR		
i) IONISATION SMOKE DETECTOR:		
a) Operation Principle	Ionization	
b) Make	Apollo 65 series)	
c) Specification	IS 11360-1985/ UL-217/EN-54/FM/ LPCB	
d) Voltage range	24V DC, 20-30V	
e) Type of Indicator lamp	LED.	
f) Compatible to work with	Optical and Heat and Multi Sensor	
ii) OPTICAL SMOKE DETECTOR :		
a) Operation Principle	Light Scattering or obscuration	
b) Make	(Apollo 65 series)	
c) Specification	IS-11360 1985/UL/BS/FM/LPCB	
d) Type of indicator lamp	LED	
e) Compatible to work with	Ionization and Heat and Multi Sensor	
iii) HEAT DETECTOR:		
a) Operation principle	Rate of rise cum fixed temperature type.	
b) Make	Apollo 65 series	
c) Specification	IS-11360/UL/BS/FM/LPCB	
d) Type of indicator lamp	LED	
e) Compatible to work with	Ionization and Optical and Multi Sensor	
iv) BEAM DETECTOR:		
a) Operating Range	5 to 120 m	
b) Operating Voltage Range	12 to 36V DC \pm 10%	
c) Operating Controller Current (with 1 or 2 Receivers)	14mA (constant)	
d) Operating Transmitter Current	8mA (per Transmitter)	
e) Power Down Reset Time	>20 Seconds	
f) Fire and Fault Relay Contracts	VFCO 2A @ 30 Volts DC resistive	
g) Operating Temp. (non-condensing) : EN54	-10°C to 55°C	

h) Optical Wavelength	850nm	
i) Led Indicators : Control Unit	Red=Fire Amber=Fault Green=System OK	
j) Receiver	Red=Fire Alignment LEDs for single persons alignment	
k) IP Rating	IP54	
l) Relative Humidity (non condensing)	93%	
m) Housing Material (Transmitter /Receiver /Controller)	UL94 V2 PC	
n) Dimensions & Weight of o) Control Unit	203 x 124 x 71.5mm (W x H x D) 606 gms	
p) Transmitter & Receiver	78 x 77 161mm (W x H x D) 207gms	

Certified that:

- a) We have understood the technical specifications thoroughly and are acceptable to us.
- b) If the work order in whole or part is placed with us, we would be able to supply the above-mentioned equipment to the branches/offices of State Bank of India, Chandigarh Circle within given time frame.
- c) Our company/firm already has an office in. Region with adequate infrastructure and technical manpower, which will remain functional till the end of warranty and AMC period.
- d) We understand that the specifications being offered by us as above are applicable to throughout the Chandigarh Circle.

Signature with Seal

Annexure -II

LIST OF CLIENTS/WORK EXECUTED WITH DETAILS REQUIRED ABOVE, DURING LAST 5 YEARS ALONG WITH ORDER COPY/CONTRACT COPY AND INSTALLATION CERTIFICATE/ CERTIFICATE OF SUCCESSFUL WORK CUM SATISFACTORY PERFORMANCE, FROM CLIENT

S. No.	Name of the work	Organization & Place / address	Cost of work	Year of Execution	Name of the Authority under whom work is executed with their address and contact numbers & E-mail Id.	Remarks as Work completed / Work in Progress
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						

[Please enclose as per format relevant order copy/contract copy and satisfactory performance cum installation cum completion certificate from the client]