



Notice Inviting Tender (NIT)

Reserve Bank Staff College, Chennai invites e-Tenders from Original Equipment Manufacturers (OEMs) or their authorized dealers / integrators for the work of 'Design, Supply, Installation, Testing and Commissioning (DSITC) of Intelligent Analogue Addressable Fire Alarm System for New hostel Building, Reserve Bank staff College at Teynampet, Chennai'.

E-Tenders comprising duly filled in details of both Part I and Part II specifications of the tender should be uploaded in CPP Portal **not later than the date and time as indicated in the Schedule of Events**. Tenderers shall submit tender proposal complete in all respect. The tenderers shall pay as Earnest Money a sum of Rs.30900/- (Rupees thirty thousand and nine hundred only). The technical bids will be **opened electronically on September 21, 2026, at 1500 hrs**. In the event of any date indicated above being declared a Holiday, the next working day shall become operative for the respective purpose mentioned herein.

Tender document can be downloaded from website www.rbi.org.in and <https://etenders.gov.in>. Any amendment(s) / corrigendum / clarifications with respect to this tender shall be uploaded on the website / e-portal only. The tenderer should regularly check the above website / e-portal for any Amendment / corrigendum / clarification on the above websites and submit their bid after verification of the same. The Bank reserves the right to reject any or all the tenders without assigning any reason thereof.

**The principal
Reserve Bank Staff College
359, Anna Salai, Teynampet
Chennai – 600 018**



Schedule of Tender

a. E-tender Reference No.	RBI/RBSC/26-27/1
b. Tender ID	2026_RBI_289413
c. Name of work	Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai.
d. Mode of Tender	e-Procurement System (Online Part I - Techno-Commercial Bid and Part II - Price Bid through https://etenders.gov.in/eprocure/app)
e. Date of NIT available to parties to download	14:00 Hrs. of September 01, 2026
f. Earnest Money Deposit	₹30,900/- from each bidder
g. Last date of submission of EMD.	14:00 Hrs. of September 21, 2026
h. Pre-Bid Meeting	Offline at Seminar Hall, Reserve Bank Staff College, Teynampet, Chennai, at 11:30 Hrs. on September 07, 2026.
i. Date of starting of e-Tender for submission of online Techno-Commercial Bid and price Bid at	14:00 Hrs. on September 08, 2026
j. Date of closing of online e-tender for submission of Techno-Commercial Bid & Price Bid.	14:00 Hrs. on September 21, 2026
k. Date & time of opening of Tender	Part I (Techno-Commercial Bid) of the tender shall be opened at 15:00 Hrs. on September 21, 2026. Part II (Price Bid) shall be opened on a subsequent date which shall be intimated to the bidders.
l. Transaction Fee	Payment of Transaction Fee as mentioned in the CPP portal through CPPP payment gateway / NEFT / RTGS.



रिज़र्व बैंक स्टाफ महाविद्यालय
RESERVE BANK STAFF COLLEGE
CHENNAI

**Tender for Design, Supply, Installation, Testing and Commissioning (DSITC) of
Intelligent Analogue Addressable Fire Alarm System for New hostel Building,
Reserve Bank staff College at Teynampet, Chennai.**

PART-I

Tender ID: 2026_RBI_289413

Tender Reference Number- RBI/RBSC/2026-27/1



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E-Tenders comprising duly filled in details of both Part I and Part II specifications of the tender should be uploaded in CPP Portal under RBI portal **not later than the date and time as indicated in the Schedule of Events (Page 5)**. Tenderers shall submit tender proposal complete in all respect. The tenderers shall pay as Earnest Money a sum of Rs.30900/- (Rupees thirty thousand and nine hundred only). The technical bids will be **opened electronically on September 21, 2026, at 1500 hrs**. In the event of any date indicated above being declared a Holiday, the next working day shall become operative for the respective purpose mentioned herein.

Tender document can be downloaded from website www.rbi.org.in and <https://etenders.gov.in/eprocure/app>. Any amendment(s) / corrigendum / clarifications with respect to this tender shall be uploaded on the website / e-portal only. The tenderer should regularly check the above website / e-portal for any Amendment / corrigendum / clarification on the above websites and submit their bid after verification of the same. The Bank reserves the right to reject any or all the tenders without assigning any reason thereof.

**The principal
Reserve Bank Staff College
359, Anna Salai, Teynampet
Chennai – 600 018**



Important Information SCHEDULE OF TENDER (SOT)

a. Tender ID	2026_RBI_289413
b. Tender Reference No.	RBI/RBSC/2026-27/1
c. Name of work	Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai.
d. Mode of Tender	e-Procurement System (Online Part I - Techno-Commercial Bid and Part II - Price Bid through https://etenders.gov.in/eprocure/app) - Guidelines for e-tender has been provided as Annexure - I .
e. Date of NIT available to parties to download	14:00 Hrs. of September 01, 2026
f. Earnest Money Deposit	₹.30900/- from each bidder
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l. Transaction Fee	Payment of Transaction Fee as mentioned in the CPP portal through CPP Portal payment gateway / NEFT / RTGS.



**Reserve Bank Staff College (RBSC)
Estate Cell, Chennai**

DISCLAIMER

Reserve Bank Staff College, Estate Cell, Chennai, has prepared this document to give background information on the Contract to the interested parties. While Reserve Bank Staff College has taken due care in the preparation of the information contained herein and believe it to be in order, neither the Reserve Bank of India nor any of its authorities or agencies nor any of their respective officers, employees, agents or advisors give any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

The information is not intended to be exhaustive. Interested parties are required to make their own inquiries and respondents will be required to confirm in writing that they have done so and they do not rely only on the information provided by RBSC in submitting the Tender. The information is provided on the basis that it is non – binding on Reserve Bank of India or any of its authorities or agencies or any of their respective officers, employees, agents or advisors.

Reserve Bank Staff College reserves the right not to proceed with the Contract or to change the configuration of the Contract, to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the matter further with any party expressing interest. No reimbursement of cost of any type will be paid to persons or entities expressing interest.



Annexure I

Important instructions for e-tender (CPPP Portal)

This is an e-procurement event of RBI. The e-procurement Service Provider/Contractor is the Central Public Procurement Portal (CPPP) <https://etenders.gov.in/eprocure/app>

Process of E-tender: Bidder manual kit is available on home page.

A) Registration for new bidder: The process involves vendor's registration with CPP portal which is free of cost.

<https://etenders.gov.in/eprocure/app?page=BiddersManualKit&service=page>

For any technical related queries please call at 24 x 7 Help Desk Number

0120-4001 002

0120-4001 005

0120- 4493395

International Bidders are requested to prefix +91 as country code

email Support:

For any Issues or Clarifications relating to the published tenders, bidders are requested to contact the respective Tender Inviting Authority.

Technical - support-eproc@nic.in

Contact Persons (RBI - During Office Hours only):

1. Smt. Nabonita Basak (AGM, Estate)
044-24302721
2. Shri. Mohan K (Manager, Estate)
044-24302730
3. Shri.Rushikesh S Dingare (Assistant Manager, Estate)
044-24302738
4. Shri. Vivekananthan S (Junior Engineer, Estate)
044-24302727

email id: principalrbbsc@rbi.org.in / estaterbbsc@rbi.org.in

Note:

Bidders are advised to remit the transaction fee well in advance before the closing time of the event so as to give themselves sufficient time to submit the bid.



Information about tenders / corrigendum uploaded shall be sent by email only during the process till finalization of tender. Hence the vendors are required to ensure that their e-mail ID provided is valid and updated at the time of registration of vendor with CPP Portal. Vendors are also requested to ensure validity of their DSC (Digital Signature Certificate).

E-tender cannot be accessed after the due date and time mentioned in NIT.

Bidding in e-tender:

Earnest Money Deposit (EMD) for a sum of **Rs.30900/- (Rupees thirty thousand and nine hundred only)** shall be remitted to the Bank Account of Reserve Bank Staff College on or before **14.00 Hrs on September 21, 2026**. “EMD-NHB-Fire Alarm System-Estate cell” shall be given as remarks while remitting EMD.

The account details for NEFT transactions are as follows.

Beneficiary Name: RBSC CHENNAI

IFSC: RBIS0SCPA01

Account No.: 186003001

Proof of remittance with transaction number (scanned copy) shall be attached / uploaded.

The bidders are also advised to send the proof of remittance with transaction number (scanned copy) to the email id principalrbsc@rbi.org.in

EMD shall also be submitted in the form of Bank Guarantee (**Annexure H**) which shall be valid **for a period of minimum six months** at the Estate Cell, Reserve Bank Staff College, Chennai - 600018. A tender which is not accompanied by such EMD will not be considered.

No interest will be paid on EMD. EMD of the unsuccessful vendor(s) will be refunded / returned by the tender inviting authority in due course.

The process involves Electronic Bidding for submission of ‘Techno-Commercial Bid’ and ‘Price Bid’.



No deviation from the terms and conditions of the tender document is acceptable after opening of Part I of the tender. Submission of bid in the e-tender floor by any vendor confirms his acceptance of terms & conditions for the tender. Any order resulting from this tender shall be governed by the terms and conditions mentioned therein. The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reasons thereof.

Tenderers are requested to quote the rate including GST for each item as specified in the portal. No change in quoted rates will be accepted.

CPP portal will be available for uploading documents and rates from September 08, 2026.



Section I

Form of Tender

Place _____

Date _____

The Principal
Reserve Bank Staff college
No. 359, Anna Salai
Teynampet
Chennai-600 018

Madam / Dear Sir

We have carefully examined the specifications, drawings, designs, and schedule of quantities relating to the works specified in the memorandum hereinafter set out and have visited and examined the installation site of the works specified in the said memorandum and having acquired the requisite information relating thereto as affecting the tender. We hereby offer to execute the works specified in the said memorandum within the time specified in the said memorandum at the rates mentioned in the attached Schedule of Quantities and in accordance in all respects with specifications, designs, drawings and instructions in writing referred to in articles of agreement, conditions of contract, general instructions to the tenderers and special conditions, conditions hereinbefore referred to, specifications, data sheet and schedule of quantities and with such materials as are provided for by us and in all other respects, in accordance with such conditions so far as they may be applicable.

MEMORANDUM

1.	Description of work	Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai.
2.	Estimated cost	₹.15.45 Lakh inclusive of GST
3.	Earnest Money	₹.30,900/-
4.	Time allowed for completion of work	02 months from the tenth day of the date of issue of work order.

1. We also agree that our tender will remain valid for acceptance by the Bank for 90 days from the date of opening of Part-I of the tender and this period of validity can be extended for such period as may be mutually agreed between the Bank and us in writing. We also agree to keep the earnest money valid during the entire period of validity of the tender.
2. Should this Tender be accepted, I/we hereby agree to abide by and fulfil all the terms and Conditions of the Tender and in default thereof, to forfeit and pay to you or your successors,



or assignees or nominees such sums of money as are stipulated in the conditions contained in the tender together with the written acceptance of the Contract.

3. I/We understand that you reserve the right to accept or reject any or all the tender either in full or in part without assigning any reason therefor. We have deposited a sum of ₹.30900/- as earnest money with the Reserve Bank Staff College, which amount is not to bear any interest. Should we fail to execute the Contract when called upon to do so, we do hereby agree that this sum shall be forfeited by us to the Reserve Bank Staff College.
4. The Tender should be uploaded in two parts. Part I contains all commercial terms, conditions and technical particulars and Part II contains only the price bid in the Bank's proforma.

Dated this____day of_2026

For and on behalf of M/s

(Signature with seal)

Name _____

Designation: _____

Place _____

Date _____

(Name of the partner of the firm authorised to make signature or Name of the person having power of attorney to sign the contract)

Certified true copy of the Power of Attorney of the above signatory should be enclosed).

Witnesses

(1) Signature with name, address and date _____

(2) Signature with Name, address and date _____



Articles of Agreement

ARTICLES OF AGREEMENT made the _____ day of _____ between the **Reserve Bank Staff College**, No. 359, Anna Salai, Teynampet, Chennai -600 018, having its Central Office at Mumbai - 400001 (hereinafter called “The Bank”) on the one part and _____ (hereinafter called “the Contractor”) on the other part.

WHEREAS the Employer is desirous of “**Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai**” and has caused specifications and Schedule of Quantities describing the works to be done which have been signed by or on behalf of the parties hereto

AND WHEREAS the said specifications, the Schedule of Quantities and drawings have been signed by or on behalf of the parties hereto.

AND WHEREAS the Contractor has agreed to execute upon the subject to the conditions set forth herein and to the conditions set forth in the Special Conditions and in the Schedule of Quantities and Conditions of Contract (all of which are collectively hereinafter referred to as “the said Conditions”) the works shown upon the said drawings and/or described in the said specification and included in the Schedule of Quantities at the respective rates therein set forth amounting to the sum as therein arrived at or such other sum as shall become payable thereunder (hereinafter referred to as ‘the said Contract Amount’).

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. In consideration of said Contract Amount to be paid at the times and in the manner set forth in the said conditions, the Contractor shall upon and subject to the said Conditions execute and complete the work shown upon the said Drawings and described in the said Drawings and described in the said Specifications and the Schedule of Quantities.
2. The Bank shall pay the Contractor the said Contract Amount, or such other sum as shall become payable, at the times and in the manner specified in the said conditions.
3. The said Conditions and Appendix thereto shall be read and construed as forming part of this agreement and the parties hereto shall respectively abide by, submit themselves to the said Conditions and perform the agreements on their part respectively in the said Conditions contained.
4. The plans, agreement and documents mentioned herein shall form the basis of this Contract.
5. This Contract is neither a fixed Lump sum Contract nor a Piece Work Contract but is a Contract to carry out the work of conducting “**Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai**” for ₹ _____/- (**Rupees _____ only**) to be paid for according to actual measured quantities at the rates contained in the Schedule of Rates and Probable Quantities or as provided in the said conditions.



6. The Bank reserves to itself the right of altering the Drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this contract.
7. Time shall be considered as the essence of this Contract and the contractor hereby agrees to commence the work from the tenth day of the date of issue of work order as provided for in the said Conditions and to complete the entire work **within a period of 02 months from the 10th day of the date of work order** subject nevertheless to the extension of time granted by the Bank.
8. All payments by the Bank under this Contract will be made only at Chennai.
9. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Chennai and only Courts in Chennai shall have jurisdiction to determine the same.
10. The Contractor / Agency shall be solely responsible for full compliance with the provisions of “the Sexual Harassment of women at work place (Prevention, Prohibition and Redressal) Act, 2013”. In case of any complaint of sexual harassment against its employee within the premises of the Bank, the complaint will be filed before the Internal Complaints Committee constituted by the Contractor / Agency and the Contractor / Agency shall ensure appropriate action under the said Act in respect to the complaint. Any complaint of sexual harassment from any aggrieved employee of the contractor against any employee of the Bank shall be taken cognizance of by the Regional Complaints Committee constituted by the Bank.
11. The contractor shall be responsible for any monetary compensation that may need to be paid in case the incident involves the employees of the contractor, for instance any monetary relief to the Bank’s employee, if sexual violence by the Employee of the contractor is proved. The contractor shall be responsible for educating its employees about the prevention of sexual harassment at work place and related issues. The Contractor shall employ its labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the RBI. The Contractor shall not employ in connection with Works any person who has not completed eighteen years of age.
12. All the workers or employees deployed by the contractor shall be considered as the employees of contractor and Reserve Bank Staff College shall not have any liability what so ever in nature in regard to such workers / employees. The Contractor shall pay to labour employed by him directly wages not less than the fair wages as per Minimum Wages Act. Fair Wage means wages, which shall include wages for weekly day of rest and other allowances whether for time or piece work, after taking into consideration prevailing market rates for similar employment in the neighbourhood but shall not be less than the minimum rates of wages fixed under the payment of Minimum Wages Act.
13. The Contractor shall in respect of labour employed by him or his sub-contractor comply with or cause to be complied with the Bidder Labour Regulation in regard to all matters provided therein. The contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employers Liability Act, 1938. Workmen’s Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act, 1970, Sexual Harassment of Women at work place (Prevention, Prohibition and Redressal) Act,



2013, or any modification thereof or any other law relating thereto and rules made there under from time to time. The Contractor shall indemnify and keep indemnified the Reserve Bank Staff College against

- i. Any claim arising out of third party loss / damage to life or property caused by / during execution of the work.
- ii. Any claim arising out of loss / damage to the workmen engaged by the contractor during the execution of work.
- iii. Any claim due to non-compliance of applicable PF / Labour laws, ESI Regulations, etc.

The contractor shall take Workmen Compensation Policy with Reserve Bank of India as the first name, at their cost, before commencement of the work.

14. The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure / systems/equipment, etc., which may come to the possession or knowledge of the Contractor during the course of discharging its contractual obligations in connection with this agreement, to any third party and shall at all times hold the same in strictest confidence. The Contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The Contractor shall not publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The Contractor shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the Contractor and the Employer shall be entitled to claim damages and pursue legal remedies.

The Contractor shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this Agreement is fully satisfied.

The Contractor's obligations with respect to non-disclosure and confidentiality will survive the expiry or termination of this agreement for whatever reason.

15. Comprehensive Annual Maintenance Service:

The tenderers shall also quote their charges for providing all inclusive comprehensive maintenance service applicable after the expiry of the one year guarantee period / Defect Liability Period (DLP) period. These rates shall remain firm and valid for a period of one year from the date of expiry of guarantee / Defect Liability Period. The following conditions will be applied separately for the annual maintenance service contract.

- a. **Spares and Consumables:** The AMC charges shall include for all types of spares and consumables required for the entire year. The DLP and CAMC shall also cover the new cables available in the fire alarm system. Replacement of existing fire alarm cable, whenever required will be in the scope of Bank.



b. Periodicity of visits: The scope of the contract will include 12 Services at monthly intervals in a year and ANY NUMBER of breakdown calls. It may be noted by the tenderers that the Bank will not provide any kind of assistance in the form of men / material / transport etc., and the tenderers will have to make their own arrangements for deputing the required skilled manpower including all necessary spares for setting right the reported / observed defects.

c. AMC Payment & Renewal: The Annual Service Contract amount shall be paid on **half yearly basis** on rendering satisfactory service. The service contract shall be renewed for an additional period of at least 06 (six) years after the initial DLP and AMC period of 01 year. In other words, an assured life and service support will be provided for a total of 08 years period after commissioning and handing over of the system.

For all subsequent years the new contract amount will be arrived at based on following formula.

$$A_C = A_P [(15+60 \times (EPI_C/EPI_P) + 25 \times (CPI_C/CPI_P))] \times 1/100$$

A_C The contract amount for the current year.

A_P The contract amount for the previous year.

EPI_C Wholesale Price Index for Electronics Products 6 months prior to the commencement date of contract for the current year.

EPI_P Wholesale Price Index for Electronics Products 6 months prior to the commencement date of contract for the previous year.

CPI_C Consumer Price Index for Industrial Workers (All India Average) 6 months prior to the commencement date of contract for the current year.

CPI_P Consumer Price Index for Industrial Workers (All India Average) 6 months prior to the commencement date of contract for the previous year.

During the period of contract, the system shall be serviced and maintained as per the frequency described in the contract agreement for AMC, to ensure that all the system equipment's are functioning normally and satisfactorily. The routine maintenance shall also include cleaning of all equipment's.



This being an emergency system, any fault in the system shall be rectified as per the rectification time given below failing which penalty shall be applied as under:

Sl.No.	Type of fault	Rectification time	Penalty for unattended complaints
(a)	Any defects resulting in total failure of the system	Within 24 hours	Rs.2,000/- per day
(b)	Any defects in independent devices, components, cables which may not result in total failure of the system	Within 48 hours	Rs.500/- per day
Maximum Penalty: 25% of the prevailing CAMC charge.			

This will be applicable during the Defect Liability Period and Comprehensive Annual Maintenance Contract period. The cost shall be payable by the contractor on demand or shall be recovered from the Bank Guarantee or any dues payable by the Bank to the contractor.

16. Performance Bank Guarantee (PBG)

16.1 Performance Bank Guarantee (PBG) during execution of work

On award of contract, the successful tenderer shall furnish an amount equal to 5% (Five percent) of the contract value in the form of a Bank Guarantee (Security Deposit) from any scheduled Bank in the form prescribed by the Bank as per Annex-___ (which will be submitted along with letter of acceptance) towards security deposit for the due fulfilment of the contract. The NEFT / DD / Bank Guarantee (BG) towards earnest money deposit furnished at the time of submission of tender will be returned thereafter. This Bank Guarantee towards security deposit for the due fulfilment of the contract, shall be valid for the contract completion period up to the date of handing over of the Fire Alarm system. The BG shall be suitably extended till completion of the work plus three (3) months in case of extension of contract period. Successful Contractor failing to furnish the Performance Bank Guarantee within stipulated time-period shall be liable for penalty at Bank rate, subject to a maximum of 0.5% of the contract value (capital cost) and their tender shall be liable to be cancelled and the EMD deposited shall be enforced without prejudice for further loss or damage.

16.2 Bank Guarantee during Defect Liability Period and CAMC period:



After completion of works but before expiry of the BG submitted for due fulfilment of execution of work, the tenderer shall furnish a new BG, in the form prescribed by the Bank as per Annex-____, for due fulfilment of the terms and obligations of the DLP and CAMC contract, for an amount equal to 10% of the capital cost of work valid for initial 04 years and thereafter for an amount of 5% of the capital cost of work for rest 04 years. The BG shall be renewed 2 weeks before expiry of the previous one failing which the above Bank Guarantee shall be enforced without prejudice to his being liable for any further loss or damage incurred in consequence, by the Bank.

The Bank reserves the right to invoke the Bank Guarantee in case of unsatisfactory performance of the terms, conditions of the DLP and CAMC set out in the tender at any time during the currency of committed period of eight (08) years (one-year DLP and 07 years CAMC).

17. That the several parts of this Contract have been read by the Contractor and fully understood by the Contractor.

IN WITNESS WHEREOF the Employer and the Contractor have set their respective hands to these presents and two duplicates hereof the day and year first hereinabove written.

If the contractor is a partnership or an individual.

IN WITNESS WHEREOF the Employer has set its hands to these presents through its duly authorized official and the Contractor has caused its common seal to be affixed hereunto and the said duplicate / has caused these presents and the said two duplicate hereof to be executed on its behalf, the day and year first hereinabove written.

If the contractor is a company.

Signature Clause

SIGNED AND DELIVERED by the Reserve Bank of India by the hand of
Shri

(Name and designation)

In the presence of

(1)

Address

(2)

Address

Witness

SIGNED AND DELIVERED by



In the presence of

(1)

Address

(2)

Address

If the party is a partnership firm or an individual should be signed by all or on behalf of all the partners.

Witness

THE COMMON SEAL OF

Was hereunto affixed pursuant to the resolutions passed by its Board of Directors at the meeting held on _____ in the presence of

(1)

(2)

Directors who have signed these presents in token thereof in the presence of

(1)

(2)

If the Contractor signs under its common seal, the signature clause should tally with the sealing clause in the Articles of Association.

SIGNED AND DELIVERED BY the Contractor by the hand of Shri _____ and duly constituted attorney.

If the Contractor is signing by hand of power of Attorney, whether a company or individual.



Section-II Commercial Conditions

E-tenders are invited from Original Equipment Manufacturers (OEM) or their authorized dealers / System Integrators for the work of Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai.

E-tenders comprising duly filled in details of both Part I and Part II specifications of the tender should be uploaded in CPP Portal website under RBI portal **not later than 14:00 Hrs of September 21,2026.**

1. **Experience prior to five years:-** The bidder must have experience of minimum 5 years' in the field of undertaking similar works viz; **Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System and associated works for the office buildings / commercial premises / industrial houses.**
2. For establishing the same, the bidder should submit copy/ies of work order/s for such work/s, issued on or before August 31, 2021, and also copy of the respective completion certificate.

Note:- **Similar work means 'Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System and associated works for office buildings / commercial premises / industrial houses'.**

3. Qualifying Works

Only those Bidders / OEMs / contractors / System Integerators who have minimum 5 years' experience (works completed on or before August 31, 2021) in the field of undertaking similar works viz. **Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for office buildings / commercial premises / industrial houses** and must have executed successfully similar works, during the last 5 years (works completed on or after August 01, 2021), individually costing as under

- (a) Three works each costing not less than 40% of the estimated Cost

Or

- (b) Two works each costing not less than 50% of the estimated Cost

Or

- (c) One work costing not less than 80% of the estimated Cost

and

- (d) Have a minimum yearly turn over of 100% of the estimated cost **during the last 3 years (2023-24, 2024-25 and 2025-26) supported by Audited financial statements**

and



(e) Have a service set up in Chennai for rendering after sales service.

and

(f) The intending tenderer should furnish solvency certificate issued by the respective banker for an amount equal to the estimated cost of the work.

And

(g) **Local Content:** Only Class-I Local suppliers will be eligible to bid as per Public Procurement (Preference to Make in India), Order 2017 (Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry Order No.P-45021/2/2017-B.E. II dated 15 June 2017) and its subsequent amendments & Ministry of Power Order No. A1/2021-FSC-Part(5) dated 16th November 2021 and its subsequent amendments. The 'local content' requirement to categorize a supplier as 'Class-I local supplier' is minimum 55% as per [Annexure I](#) of Ministry of Power Order No. A-1/2021- FSC-Part(5) dated 16th November 2021.

The bidder shall submit a duly signed declaration from the OEM, certifying the extent of local content, in the format specified in [Annexure-Q](#).

4. Only tenderers who qualify as above will be eligible to tender for the work. A tender submitted by a firm who is found to be not satisfying the above criteria will be liable for rejection.

Tenderers should upload the following documents in respect of fulfilling their eligibility with **suitable file names as indicated**.

- a) Copies of detailed work order/s indicating scope and value of work/s completed on or before August 31, 2021, for establishing prior experience before five years (file name eg: WO1, WO2 etc.)
- b) Copies of detailed work order/s, in respect of similar work/s, indicating scope and value of work/s and completion certificate/s in respect of the same work, executed on or after August 01, 2021, for establishing the qualifying works executed by the bidder during the last five years (file name eg: WO1, WO2 etc.)
- c) List of completed works with all the details as in the format of [Annexure 'A'](#) and ['P'](#)
- d) Completion certificate obtained from the clients in the prescribed format as per [Annexure 'B'](#) for qualifying works
- e) Proof of remittance of EMD / Copy of Bank Gurantee in lieu of Earnest money deposit as per [Annexure 'H'](#)
- f) Banker's Certificate as per [Annexure 'C'](#)
- g) Audited financial statement for turnover for last 3 years ie. 2023-24, 2024-25 and 2025-26 (File name eg: FS1, FS2 etc.)
- h) Details of service setup with copy of proof of address - In the format of [Annexure 'D'](#)
- i) Details of technical deviations proposed – As per [Annexure 'E'](#)
- j) The particulars / Catalogues and the names of manufacturers of specified item.
- k) Details of Bankers as per [Annexure 'F'](#)



- l) Copy of Power of Attorney as per [Annexure 'G'](#), Original to be submitted by the successful bidder to RBSC.
- m) Technical details of the proposed system as per [Section VIII](#)
- n) Duly filled and Signed NEFT Mandate form as per [Annexure 'K'](#)
- o) Escalation matrix as per [Annexure 'L'](#)
- p) Undertaking from Tenderer for maintenance support as per [Annexure 'M'](#)
- q) Undertaking from OEM for maintenance support as per [Annexure 'O'](#)
- r) Copy of Certificate of Incorporation
- s) Copy of GST Registration
- t) If the tenderer is a Micro or Small Enterprise (MSE) then the tenderer shall submit copy of MSE Registration certificate.
- u) Signed copy of form of tender
- v) Any other information relevant to the proposed work

Note 1 (Regarding client certificate):

- In respect of Government Departments / Public Sector Undertakings, the certificate should be signed by the concerned Executive Engineer or an officer in an equivalent or higher rank.
- In respect of Departments other than Government Departments / Public Sector Undertakings apart from the certificates mentioned above, the TDS certificates matching with the payments related to the work executed shall also be enclosed.

Note 2: The tenderer shall submit the above document/s, in original, as and when demanded by the College.

Non-submission of the above documents may lead to disqualification of the bidder.

Only tenderers who qualify as above will be eligible to tender for the work. A tender submitted by a firm who is found to be not satisfying the above criteria will be liable for rejection.

18. Intending tenderers shall remit an EMD amount of ₹.30900/- by way of a Demand Draft (DD) or NEFT/RTGS or Bank Guarantee drawn on scheduled bank payable to the Reserve Bank Staff College, Chennai on or before 2:00 PM on September 21, 2026.

The account details for NEFT / RTGS transactions are as follows. Bidders are advised to remit EMD well in advance to avoid last minute hassle.

Beneficiary Name: RBSC CHENNAI
IFSC : RBIS0SCPA01
Account No. : 186003001

Proof of remittance with transaction number (Scanned copy) shall be attached / uploaded. The bidders are also advised to send the proof of remittance with transaction number (scanned copy) to principalrbsc@rbi.org.in.

A tender which is not accompanied by such EMD will not be considered.



19. EMD shall also be submitted in the form of Bank Guarantee ([Annexure 'H'](#)) at the Estate Cell, Reserve Bank Staff College, Chennai - 18. A tender which is not accompanied by such EMD will not be considered. No interest will be paid on EMD. The EMD of the successful tenderer shall be released without any interest on issue of virtual completion certificate. The tenderers who do not qualify the requirements of pre-qualification criteria will be returned the EMD without interest on non-acceptance of their bid. The Earnest Money Deposit of unsuccessful tenderers in Part II shall be released to them without any interest after award of work to successful bidder.
20. **Pre-bid meeting:** - A pre-bid meeting will be held at **11:30 Hrs on September 07, 2026** at **Seminar Hall, Second Floor**, Reserve Bank Staff College, Chennai to discuss / clarify details about the tender. No separate communication will be sent for this meeting. All the intending tenderers are advised to be present. Clarifications will be uploaded as corrigendum to the tender. Bidders are advised to see the corrigendum, if any before submitting their bids. Bidder may also send their queries to the e-mail id principalrbsc@rbi.org.in before the scheduled date of prebid meeting.
21. Tenderers are required to submit the details of the works carried out by them during the last 5 years along with the name and contact numbers of the users of the equipment in the [Annexure 'A'](#).
22. A tender submitted by a firm who is found to be not submitting the above details will be rejected.
23. The technical and commercial details of those tenderers who do not qualify the requirements of pre-qualification criteria will not be considered for evaluation. Part II bid of only those vendors who qualify the requirements of technical and commercial conditions / details will be considered for opening. Opening of Part II will be intimated to the qualified vendors.
24. The Reserve Bank of India reserves the right to accept or reject any or all the tenders, in full or in part, without assigning any reason therefore. The Bank also reserves the right to accept the tender of any firm.
25. Vendors are advised to verify the website for corrigendum, if any, before submitting the bid. No clarification will be entertained after 17:30 Hrs on September 07, 2026.
26. Vendors are requested to quote their rate for **Design, Supply, Installation, Testing and Commissioning of the FAS system inclusive of G.S.T and any other taxes, Octroi etc.** With respect to buyback of old equipment, **vendors are requested to quote the rates in positive numbers, inclusive of GST.** (System will deduct the buy-back amount from the capital cost).



- 27. Validity of tender:** The tenders shall be valid for a period of 90 days from the date of opening of Part I of the tender.
28. The rates quoted shall be inclusive of transport, packing, forwarding, insurance, etc., and shall be for the complete work duly installed and commissioned at site. The prices quoted shall remain firm for the entire period of contract and shall not be subjected to any variations in the foreign exchange or variations of any other taxes, levies, duties, etc. No import license will be furnished by the Bank. The tenderers shall make their own arrangements for import of any parts or components, if any, required for completion of the work. Tenderer should have GST registration number. Tenderers must quote their rates including GST levied by the Central Government and State Government. The Bank is not responsible for payment of GST for the services rendered by the contractor. It is the responsibility of the contractor to pay the GST to the tax authority.
- 29. Period of Completion of work:** The entire work of Design, Supply, Installation, Testing and Commissioning of the Fire Alarm System shall be completed within a period of **02 Months from the 10th day of the date of issue of work order.**
- 30. Damages for non-completion :** If the Contractor fails to complete the works within tender specified completion period, 0.25% of the value of work order, i.e., quoted capital cost will be deducted per week, for the period during which the said works shall so remain incomplete, subject to a maximum of 10% of the contract amount and the Employer may deduct such amount as liquidated damages or any money due to the Contractor.
- 31. Service set-up:** The tenderers shall indicate the details of the service centre at Chennai, including the copy of proof of address, staff strength, contact numbers, availability of spares for the system and escalation matrix as per the [Annexure 'L'](#). The Tenderers are advised to visit the site of installation and acquaint themselves of the site conditions before tendering.
- 32. Performance Bank Guarantee (PBG)**

19.1 Performance Bank Guarantee (PBG) during execution of work

On award of contract, the successful tenderer shall furnish an amount equal to 5% (Five percent) of the contract value in the form of a Bank Guarantee (Security Deposit) from any scheduled Bank in the form prescribed by the Bank as per Annex-___ (which will be submitted along with letter of acceptance) towards security deposit for the due fulfilment of the contract. The NEFT / DD / Bank Guarantee (BG) towards earnest money deposit furnished at the time of submission of tender will be returned thereafter. This Bank Guarantee towards security deposit for the due fulfilment of the contract, shall be valid for the contract completion period up to the date of handing over of the Fire Alarm system. The BG shall be suitably extended till completion of the work plus three (3) months in case of extension of contract period. Successful Contractor failing to furnish the Performance Bank



Guarantee within stipulated time-period shall be liable for penalty at Bank rate, subject to a maximum of 0.5% of the contract value (capital cost) and their tender shall be liable to be cancelled and the EMD deposited shall be enforced without prejudice for further loss or damage.

19.2 **Bank Guarantee during Defect Liability Period and CAMC period:**

After completion of works but before expiry of the BG submitted for due fulfilment of execution of work, the tenderer shall furnish a new BG, in the form prescribed by the Bank as per Annex-____, for due fulfilment of the terms and obligations of the DLP and CAMC contract, for an amount equal to 10% of the capital cost of work valid for initial 04 years and thereafter for an amount of 5% of the capital cost of work for rest 04 years. The BG shall be renewed 2 weeks before expiry of the previous one failing which the above Bank Guarantee shall be enforced without prejudice to his being liable for any further loss or damage incurred in consequence, by the Bank.

The Bank reserves the right to invoke the Bank Guarantee in case of unsatisfactory performance of the terms, conditions of the DLP and CAMC set out in the tender at any time during the currency of committed period of eight (08) years (one-year DLP and 07 years CAMC).

33. The scope of work shall include the following.

The equipment supplied shall be guaranteed against all types of defects for a period of one year from the date of handing over of the Fire Alarm System to the Bank. Upon successful completion of the **defect liability period of one year**, the system will be put under **Comprehensive Annual Maintenance Contract for the next seven years**.

The scope during the DLP and CAMC will be as follows:

- (a) Any defect(s) in the system / sub-assemblies, found within the guarantee period and the comprehensive annual maintenance contract (CAMC) period shall be rectified / replaced by the tenderer without any additional cost including replacement of detectors, all spare parts and loop wiring and labour involved, etc., the rates quoted should include all such factors. The charges for comprehensive annual maintenance service shall include replacement of any part of the system, including all required spares, consumables, etc., during the service contract period. The DLP and CAMC shall cover the new cables available in the fire alarm system. Replacement of existing fire alarm cable, whenever required will be in the scope of Bank.
- (b) During this period, full servicing and cleaning of devices at quarterly intervals shall be done including attending to ANY NUMBER of breakdown calls.
- (c) The tenderers shall also quote their charges separately for the Comprehensive



Annual Maintenance Service contract after the expiry of one-year guarantee period.

(d) The payment shall be made on **half yearly basis** on rendering satisfactory service.

The service contract rate shall also take into account all the cost, including travel cost from the nearest service station, cost of spares, etc.

During the Guarantee and CAMC period, the system will be inspected and checked by deputing a competent, trained service engineer on quarterly basis by creating a fire / smoke simulation in the loops.

- Critical area detectors, viz., server rooms / UPS rooms / switch room, etc., should be invariably included and checked during the regular visits.
- General inspection of panel for faults, fire alarms, etc.
- Suitable log register indicating faults, rectification done with date & time of breakdown should be maintained and got signed from the security / Fire officer.
- Bank will not provide any assistance in the form of men / material during the currency of the guarantee and service contract.
- The tenderers will have to make their own arrangements for deputing a helper to skilled personnel including all necessary spares for rectification of the defects reported / observed.

This being an emergency system, any fault in the system shall be rectified as per the rectification time given below failing which penalty shall be applied as under:

Sl.No.	Type of fault	Rectification time	Penalty for unattended complaints
(a)	Any defects resulting in total failure of the system	Within 24 hours	Rs.2,000/- per day
(b)	Any defects in independent devices, components, cables which may not result in total failure of the system	Within 48 hours	Rs.500/- per day
Maximum Penalty: 25% of the prevailing CAMC charge.			

The service contract shall be renewed every year for a further additional period of at least 6 years after the initial annual service contact period of one year after the expiry of one-year warranty / DLP.

While renewing the contract the new contract amount will be arrived at based on the following



formula:

$A_C = A_P [(15+60x(EPI_C/EPI_P)+25x(CPI_C/CPI_P))]1 / 100$	
A_C	The contract amount for the current year.
A_P	The contract amount for the previous year.
EPI_C	Wholesale Price Index for Electronic Products 6 months prior to the commencement date of contract for the current year.
EPI_P	Wholesale Price Index for Electronic Products 6 months prior to the commencement date of contract for the previous year.
CPI_C	Consumer Price Index for Industrial Workers (All India Average) 6 months prior to the commencement date of contract for the current year.
CPI_P	Consumer Price Index for Industrial Workers (All India Average) 6 months prior to the commencement date of contract for the previous year.

34. Evaluation of tenders:

Tenders will be evaluated on the basis of Net Owning Cost of the System comprising of the Capital Cost of the system(A) and taking into account the effect of rates quoted for Comprehensive Annual Maintenance service contract charges (CAMC) for a period of 7 years after the expiry of one-year defect liability period and the rebate for old system.

Net Owning cost shall be the total of Capital Cost of the System (A) plus the NPV of comprehensive annual maintenance Service contract charges for the period of 7 years after 01 year defect liability period.

NPV Factor will be calculated assuming **5% increase** in contract amount every year after the first year of AMC, half yearly payment and a **discount rate of 8%**.

Net Owning Cost of System = Capital Cost (A) – Rebate offered under buyback for old system (B) + CAMC Charges (C) x MF
(MF is the NPV factor for 08 years (01year warranty+ 07 year AMC) = 5.6321)

Minimum Base Rate for Comprehensive AMC:

Minimum Base Rate for Comprehensive AMC is 5% (Five percent) of total capital cost. In case, the tenderer quotes the rates for comprehensive AMC lower than 5% (Five) of the quoted capital cost, then the 5% (Five) of the quoted capital cost will be considered as AMC for calculation of Total Cost of Ownership.

Note: Notwithstanding the above, the Bank shall pay only the quoted rate of the AMC during the currency of the committed contract period subject to renewal formulae indicated in the tender.



35. Terms of Payment:

The following terms of payment, subject to statutory deductions, will apply to the contract:

- a. **60% of the quoted rate pro rata against receipt of the material at site and on submission of the following documents:**
 - i) Manufacturer's Inspection and Test Certificates;
 - ii) Contractor's Certificate that all components, parts, sub systems, consumables, etc., for successful installation, commissioning and testing of the systems including maintenance have been received at site in good condition and if any shortfall is noticed during installation, commissioning and testing they will be supplied free to the Bank.
 - iii) Policies of insurance covering all the risks during transit, storage, installation, commissioning, testing and handing over including third party liabilities.
- b. **40% of the quoted rate against erection, testing, commissioning and handing over of the system to the Bank and on submission of a Bank Guarantee amounting to 10% of the contract amount, initially valid for 4 years, in a form ([Annexure 'J'](#)) acceptable to the Bank as security against due fulfillment of the terms and obligations of the Contract, guarantee period and service contract for the entire life cycle of the equipment.**
36. **Insurance:** - The Contractor shall at his own expense, arrange to effect and maintain (until the virtual completion of the contract) with an IRDA approved office the following **insurance policies in the joint name of the employer and himself with the employer being first (The Principal, Reserve Bank Staff College)** and deposit such policy or policies with the employer for the currency of this contract.
 - a) Storage, erection, testing and commissioning policy (C.A.R. policy) for the total amount of contract.
 - b) Workmen compensation policy.
 - c) Third party liability policy with the limits as under.
 - d) Rs.10,00,000/- per annum
 - e) Rs.2,00,000/- per occurrence
37. The payment for the system will be made by the office at which the fire alarm system is supplied and installed. The dispute arising out of this contract will also be sorted out within the jurisdiction of courts situated in Chennai where the said fire alarm system have been installed.
38. **The contractors shall upload all technical details of the system along with the tender. The tenderers are requested to use the format given in Section VIII only for this purpose (and do not use their own formats and data sheets). However, if they wish to submit any additional information / details, they may upload the same on a separate sheet with Part I of the tender.**
39. **Training:** The tenderer shall impart training, if any, to the Bank's Engineers / Technicians on the system before handing over the system without any charge to the Bank.



40. Agreement: The successful tenderer shall execute an agreement with the Bank on non-judicial stamp paper in the format enclosed within ten days of receipt of the letter of acceptance. However, the issue of letter of acceptance by the Bank shall be construed as a binding contract, as though such an agreement has been executed and all the terms and conditions shall apply on this contract.

Signature of the contractor _____

Name of the firm _____

Seal of the firm _____



Section III

Safety Code

1. First aid appliances including adequate supply of sterilised dressings and cotton wool shall be provided in a readily accessible place.
2. An injured person shall be taken to a public hospital without loss of time, in cases where the injury necessitates hospitalisation.
3. Suitable and strong scaffolds should be provided for workmen for all work that cannot safely be done from ground.
4. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used an extra mazdoor shall be engaged for holding the ladder.
5. The excavated material shall not be placed within 1.5 meters of the edge of the trench or half of the depth of trench, whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
6. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing, the minimum height shall be one metre.
7. No floor, roof or other part of the structure shall be so overloaded with debris of materials as to render it unsafe.
8. Workers employed on mixing and handling material such as asphalt, cement mortar or concrete and lime mortar shall be provided with protective footwear and rubber hand-gloves.
9. Those engaged in welding works shall be provided with welder's protective eye-shields and gloves.
10. i) No paint containing lead or lead products shall be used except in the forms of paste or readymade paint.
ii) Suitable face masks shall be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped.
11. Overalls shall be supplied by the contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the period of cessation of work.
12. Hoisting machines and tackle used in the works, including their attachments, anchorage and support shall be in perfect condition.
13. The ropes used in hoisting or lowering material or a means of suspension shall be of durable quality and adequate strength and free from defects.
14. The contractor shall provide all the safety gadgets to the workers for carrying out the work as per the statutory norms.
15. During the work execution necessary fire safety measures shall also be taken.



Fire Safety

1. Cutting / drilling machine and other electrically operated equipment used at site shall be plugged into correctly rated electrical outlets.
2. Only ISI marked 3 pin plug and other appliances and equipment shall be used.
3. Electrical power cables / wires used shall not have any joints and shall be properly rated.
4. All electrical appliances, i.e., welding, drilling, cutting machine, etc., shall be safely and securely earthed to prevent leakage current while in operation.
5. Before commencing the welding work for the first time on any day, fire section shall be informed and only after the site inspection by the Fire officers / Personnel, work shall be started.
6. Two buckets of water and sand shall be kept in an easily accessible area on the site.
7. Fire extinguishers recommended and issued by fire officers shall be kept on the site.
8. Used paint drums shall be stored in specified store only after closing them properly.
9. Personal protective equipment such as safety shoes, hand gloves, welder's mask, ear plug etc., depending upon the requirement of the work shall be provided by the contractor to the workmen to prevent occupational health hazards.
10. The safety belt shall be provided by the contractor and used by the workmen while working from height for more than 10 feet from Ground level.
11. None of the passages near lift lobby and staircases shall be used for stacking / dumping of any kind of materials / waste.
12. Both the staircase doors shall be normally kept closed.
13. None of the fire extinguishers shall be removed / shifted from its designated location.
14. Power supply shall be switched off from the mains when equipment is not in use.
15. Wood-shavings and saw-dust generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
16. Any debris generated from the work shall be collected on daily basis, removed from site and stored at the designated place in proper manner.
17. Battery operated emergency light / torches shall be provided by the contractor to the workmen while working beyond office hours.
18. Power Supply should be tapped for use from RCCB / RCBO.



Section IV

The Conditions herein before referred to

1. In constructing these conditions, the specification, schedule of quantities and Contract Agreement, the following words shall have the meaning herein assigned to them except where subject or context otherwise requires.

- | | |
|---------------------------|--|
| a) "Employer" | Shall mean the Reserve Bank Staff College and shall include its assignees and successors. |
| b) In the case of company | "Contractor shall mean _____ a company incorporated under _____ and _____ having its registered office at _____ and shall include its successors and assigns. |
| c) "Site" | Shall mean the site of the contract works including any building and erection thereon and any other land (inclusively) as aforesaid allotted by the Employer for the Contractor's use. |
| d) "This Contract" | Shall mean the Article of Agreement, the special conditions, the conditions, the Appendix, the schedule of quantities and specifications attached hereto and duly signed. |
| e) "Notice in writing" | Shall mean a notice in written, typed or printed or written notice" characters sent (unless delivered personally otherwise proved to have been received) by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post it would have been delivered. |
| f) "Act of Insolvency" | Shall mean any Act of insolvency as defined by the Presidency Town Insolvency Act or the provincial insolvency Act or any Act amending such original Act. |
| g) "Net Prices" | If in arriving at the contract amount the Contractor shall have added to or deducted from the total of items in the Tender any sum, either as a percentage or otherwise, then net price of any item in their tender shall be the sum arrived at by adding to or deducting from the actual figures appearing in the Tender as the price of that the item a similar percentage or proportionate sum provided always that in determining the percentage or proportion of the sum so added or deducted by the Contractor the total amount of the any Prime Cost items and provisional sums of money shall be deducted from the total amount of the tender. The expression "net rates" or "net prices" when used with |



reference to the contract or account shall be held to mean rates or prices so arrived at.

h) "The works"

Shall mean **Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai.**

2. **Scope of Contract:** The contractor shall carry out and complete the said work in every respect in accordance with this contract and with the directions of and to the satisfaction of the Bank's Engineer. The Bank's Engineer may in his absolute discretion and from time to time issue further drawings and / or written instructions, details, direction and explanations which are hereafter collectively referred to as "the Bank's Engineer's instruction in regard to":

- a) The variations or modifications of the design, quality or works or the addition or omission or substitutions of any work.
- b) Any discrepancy in the Drawing or between the Schedule of Quantities and / or Drawing and / or specifications.
- c) The removal from the site of any materials brought thereon by the contractor and the substitution of any other material therefor.
- d) The removal and/or re-execution of any works executed by the contractor.
- e) The dismissal from the works of any persons employed thereupon.
- f) The opening up for inspections of any work covered up.
- g) The amending and making good of any defects under clause 20 hereof.

The contractor shall forthwith comply with and duly execute any work comprised in such Bank's Engineer's instructions provided always that verbal instructions, directions and explanations given to the Contractor or his representative upon the works by the Bank's Engineer shall, if involving a variation, be confirmed in writing by the Contractor within seven days, such shall be deemed to be the the Employer's instructions within the scope of the Contract.

The contractor shall submit a statement of variations giving quantity and rates duly supported by analysis of rates, vouchers etc. The rates on scrutiny and final acceptance by the Employer shall form a supplementary tender. The Employer shall not be liable for payment of such variations until these statements are sanctioned by him.

3. The Contract shall be executed in triplicate and the Bank's Engineer, the Employer and the Contractor shall be entitled to one executed copy each for his use. Before the issue of the final certificate to the Contractor he shall submit to the Bank's Engineer all Drawings and Specifications.



4. The Contractor shall provide at his cost everything necessary for the proper execution of the works according to the intent and meaning of the Drawings, Schedule of Quantities and specifications taken together, whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred therefrom and if the Contractor finds any discrepancy in the Drawings or between the Drawings, Schedule of quantities and Specifications, he shall immediately and in writing refer the same to the Bank's Engineer, who shall decide which is to be followed.
5. **Authorities, notices and patents:** The Contractor shall conform to the provisions of any Act of the Legislature relating to the works and to the regulations and bye-laws of any authority and of any water, electricity supply and other companies and/or authorities with whose system the structure is proposed to be connected and shall, before making any variations from the Drawings or Specifications that may be necessitated by so conforming, give to the architect written notice, specifying the variation proposed to be made and the reason for making it and apply for instructions thereon. In case, the Contractor shall not within ten days receive such instructions, shall proceed with the work conforming to the provisions, regulations, or bye-laws in question and any variation so necessitated shall be dealt with under clause 17 hereof.

The contractor shall bring to the attention of the Employer all notices required by the said Acts, regulations or bye-laws to be given to any authority and pay to such authority or to any public office all fees that may be properly chargeable-in respect of the works and lodge the receipts with the Employer.

The Contractor shall indemnify the Employer against all claims in respect of patent rights and shall defend all actions arising from such claims and shall himself pay all royalties, license fees, damages cost and charges of all and every sort that may be legally incurred in respect thereof.

6. **Setting out of work:** The contractor shall set out the works and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions levels, dimensions and alignment of all parts thereof. If at any time any error in this respect shall appear during the progress of the works or within a period of one year from the completion of the works, the Contractor shall, if so required, at his own expense rectify such error to the satisfaction of the Bank's Engineer.
7. **Materials and Workmanship to conform to description:** All materials and workmanship shall so far as procurable be of the respective kinds described in the Schedule of Quantities and/or specifications and in accordance with the contract and the Contractor shall furnish to the Employer with all invoices, accounts, receipts and other vouchers to prove that the materials comply therewith. The Contractor shall at his own cost arrange for and/or carry out any test of any materials.



8. **Contractor's superintendence and representative on the works:** The Contractor shall give all necessary personal superintendence during the execution of the works and so long thereafter as the Employer may consider necessary until the expiration of the "Defects Liability Period" stated in the Appendix hereto. The contractor shall, also during the whole time the works are in progress employ a competent representative who shall be constantly in attendance at the works while the men are to work. Any directions, explanations, instructions or notice given by the Bank's Engineer to such representative shall be held to be given to the Contractor.
9. **Dismissal of workmen:** The Contractor shall on the request of the Bank's Engineer immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Bank's Engineer, be incompetent or misconduct himself and such persons shall not be again employed on the works without the permission of the Bank's Engineer.
10. **Access to works:** The Employer, shall at all reasonable times, have free access to the works and/or to the workshops, factories or other places where materials are lying or from which they are being obtained and the Contractor shall give every facility to the Employer necessary for Inspections and examination and test of the materials and workmanship. No person not authorised by the Employer except the representatives of public authorities shall be allowed on the works at any time.
11. **Bank's Engineer:** The term Bank's Engineer shall mean the person appointed and paid by the Employer to inspect the works. The Contractor shall afford the Bank's Engineer every facility and assistance for inspecting the works and materials and for checking and measuring time and materials.

The Bank's Engineer, or the Employer shall have power to give notice to the Contractor or to his representative of non-approval or any work or materials and such work shall be suspended or the use of such materials shall be discontinued. The work will from time to time be examined by the Assistant Manager (Technical), but such examination shall not in any way exonerate the Contractor from the obligation to remedy any defects which may be found to exist at a stage of the works or after the same is completed. Subject to the limitations of this clause the Contractor shall take instructions only from the Bank's Engineer.
12. **Assignment and Subletting:** The whole of the works included in the Contract shall be executed by the Contractor and the contractor shall not directly or indirectly transfer, assign or under-let the Contract or any part share thereof or any interest therein without the prior written consent of the Employer and not undertaking shall relieve the Contractor from the full and entire responsibility of the Contract or from active superintendence of the works during their progress.



13. No alteration, omission or variation shall vitiate this contract but in case the Bank's Engineer thinks proper at any time during the progress of the works to make any alterations in, or addition to, or omissions from the works or any alteration in the kind of quality of the materials to be used therein and shall give notice thereof in writing under his hand to the Contractor, the Contractor shall alter, add to, or omit from, as the case may be, in accordance with such notice, but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviation from any of the provisions of the Contract. Stipulations, specifications or Contract Drawings without the previous consent in writing of the Employer and the value of such extras alterations, additions or omission shall, in all cases, be determined by the Employer in accordance with the provisions of **Clause 17** hereof, and the same shall be added to, or deducted from the Contract Amount, as the case may be accordingly.
14. **Schedule of Quantities**: The Schedule of quantities, unless otherwise stated shall be deemed to have been prepared in accordance with the Standard Method of Measurement. Any error in description or in quantity or in omission of items from the schedule of quantities shall not vitiate this contract but shall be rectified and the value thereof, as ascertained under **Clause 17** hereof, shall be added to, or deducted from the Contract Amount (as the case may be) provided that no rectification of errors, if any, shall be allowed in the Contractor's schedule of rates.
15. **Sufficiency of Schedule of Quantities**: The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the Schedule of Quantities and/or the schedule of rates and prices which rates and prices shall cover all his obligations under the contract, and all matters and things necessary for the proper completion of the works.
16. **Measurement of works**: The Bank's Engineer may, from time to time, intimate to the contractor that he requires the works to be measured and the Contractor shall forthwith attend or send a qualified agent to assist the Assistant Engineer in taking such measurements and calculations and to furnish all particulars or to give all assistance required by any of them.

Should the Contractor not attend or neglect or omit to send such agent then the measurement taken by the Bank's Engineer or a person approved by him shall be taken to be correct measurement of the works. Such measurements shall be taken in accordance with the Mode of Measurements detailed in the Specifications.

The Contractor or his Agent may at the time of measurement take such notes and measurement as he may requires.

All authorised extra works, omissions and all variations made with the prior approval in writing of the Employer shall be included in such measurements.



17. Prices for extra: The Contractor may, when authorised and shall, when directed, in writing by the Employer, add to, omit from or vary the works shown upon the drawings, or described in the specification, or included in the schedule of Quantities, but the contractor shall make no addition, omission or variation without such authorisation or direction. A verbal authority or direction by the Bank's Engineer shall, if confirmed by them in writing within seven days, be deemed to have been given in writing.

No claim for an extra shall be allowed unless it shall have been executed under provisions of clause above hereof with the concurrence of the Employer herein mentioned. Any such extra in herein referred to as authorised and shall be made in accordance with the following provisions.

- (a) (i) The net rates or prices in the original tender shall determine the valuation of the extra work where such extra work in similar character and executed under conditions as the work priced therein.
- (ii) Rates for all items, wherever possible should be derived out of the rates given in the priced Schedule of Quantities.
- (b) The net prices of the original tender shall determine the value of items omitted provided if omissions vary the conditions under which any remaining items of works are carried out, the prices for the same shall be valued under sub-clause (c) hereof.
- (c) Where the extra works are not of similar character and/or quoted under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items of works are carried out or if the amount of any omissions or additions relative to the amount of the whole of the Contract works or to any part thereof shall be such that in the opinion of the Bank's engineer, the net rate or price contained in the priced Schedule of Quantities or tender or for any item of the works involves loss or expenses beyond that reasonably contemplated by the contractor or is by reason of such omission or addition rendered unreasonable or inapplicable, the Bank's Engineer shall fix such other rate or price as in the circumstances he shall think reasonable and proper, with the prior approval in writing of the Employer.
- (d) Where extra work cannot be properly measured or valued, the Contractor shall be allowed day work prices as the net rates stated in the tender or the Priced Schedule or Quantities or, if not so stated, then in accordance with the local day work rates and wages for the district provided that in either case vouchers specifying the daily time (the workmen's names) and materials employed be delivered for verification to the Bank's Engineer at or before the end of the week following that in which the work has been executed.

The measurement and valuation in respect of the Contract shall be completed within the "period of final measurements" stated in the Appendix.

18. Unfixed materials when taken into account to be the property of the Employer



Where in any certificates (of which the Contractor has received payment) the Bank's Engineer has included the value of any unfixed materials included for and/or placed on or adjacent to the works such materials shall become the property of the Employer and they shall not be removed except for use upon the works, without the written authority of the Employer. The Contractor shall be liable for any loss of, or damage to, such materials.

- 19. Removal of improper work:** The Employer shall, during the progress of the works, have power to order in writing from time to time the removal from the works within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Bank's Engineer are not in accordance with the Specifications, the substitutions of proper materials, and the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the drawings & specifications or instructions and the contractor shall forthwith carry out such order at his own cost. In case of default on the part of Contractor to carry out such order, the Employer shall have the power to employ any to carry out the same and all expenses consequent thereon, or incidental thereto, shall be borne by the Contractor, or may be deducted by the Employer from any moneys due, or that may become due, to the Contractor.
- 20. Defects after virtual completion:** Any defect, shrinkage, settlement or other fault which may appear within the "Defects Liability Period" stated in the Appendix hereto, or, if none stated them within twelve months after the virtual completion of the works, arising in the opinion of the Employer from materials of workmanship not in accordance with the contract, shall upon the direction in writing of the Employer and within such reasonable time as shall be specified therein, be amended and made good by the Contractor, at his own cost and in case of default the Employer may employ and pay other persons to amend and make good such defects, shrinkage settlements or other faults and all damages, loss and expenses consequent thereon are incidental thereto shall be made good and borne by the Employer or may be deducted by the Employer, upon the Bank's Engineer's Certificate in writing, from any money due or that may become due to the Contractor, or the Employer may in lieu of such amending and making good by the Contractor deduct from any money due to the Contractor a sum, to be determined by the Employer equivalent to the cost of amending such work and in the event of the amount retained under clause 32 hereof being insufficient, recover the balance from the Contractor, together with any expenses the Employer may have incurred in connection therewith. Should any defective work have been done or materials supplied by any sub-contractor employed on the works who has been nominated as provided under clause 12 and 22 hereof, the contractor shall be liable to make good in the same manner as if such work or material had been done or supplied by the Contractor and been subject to the provision of this clause 2 hereof. The contractor shall remain liable under the provisions of this clause, the signing of any certificate or the passing of any accounts by the Employer.
- 21. Certificate of virtual completion and defects liability period:** The works shall not be considered as completed until the Bank's Engineer has certified in writing that they have



been virtually completed. The defects liability period shall commence from the date of such certificates.

22. **Nominated Sub-Contractor:** All Specialists, Merchants, Tradesmen and others executing any work of supplying and fixing any goods for which the prime cost prices or provisional sums are included in the Schedule of Quantities and/or Specifications who may be nominated or selected by the Employer or hereby declared to be sub-contractors employed by the contractor and are herein referred to as nominated sub-contractors.

No nominated sub-contractors shall be employed on or in connection with the works against the Contractor shall make reasonable objection are (save where the Architect and the Contractor shall otherwise agree) who will not enter into contract providing.

- (a) That the nominated sub-contractor shall indemnify the contractor against the same obligation in respect of the sub-contract as the contractor is under in respect of this contract.
- (b) That the nominated sub-contractor shall indemnify the contractor against claims in respect of any negligence by the sub-contractors his servants or agents or any misuse by him or them or any scaffolding or other plant, the property of the Contractor or under any Workmen's Compensation Act in force.
- (c) Payment shall be made to the nominated sub-contractor within fourteen days of his receipt of the Employer's Certificate provided that before any Certificate is issued the Contractor shall upon request furnish to the Bank proof that all nominated sub-contractors accounts included in previous certificates have been duly discharged; in default whereof the Employer may pay the same upon a Certificate of the Bank and deduct the amount thereof from any sums due to the Contractor. The exercise of this power shall not create private of contract as between Employer and Sub-Contractor.

23. **Other persons employed by Employer:** The Employer reserves the right to use premises and any portion of the site for the execution of any work not included in this Contract which it may desire to have carried out by other persons, and the Contractor shall allow all reasonable facilities for the execution of such work but shall not be required to provide any plant or material for the execution of such work except by special arrangement with the Employer. Such work shall be carried out in such manner as not to impede the progress of the works included in the Contract and the Contractor shall not be responsible for any damage or delay which may happen to or occasioned by such work.

24. **Insurance in respect of damage to person and property:** The Contractor shall be responsible for all injury to persons, animals or things, and for all structural and decorative damage to property which may arise from the operation or neglect of himself or of any nominated sub-contractor or any employee of either, whether such injury or damage arises from carelessness accident or any other clause whatever in any connected way with the carrying out of this Contract. This clause shall be held to include inter alia, any damage to



buildings, whether immediately adjacent or otherwise and any damage to road, streets, foot-paths, bridges or ways as well as damage caused to the buildings and works forming the subject of this contract by frost, rain, wind or other inclemency of weather. The Contractor shall indemnify the Employer and hold it harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of any legislature or otherwise and also in respect of any award or compensation or damages consequent upon such claim.

The Contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver up the whole of the Contract works complete to and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

An insurance policy covering third party liability shall be taken by the contractor to cover the loss / disablement of human life (persons not belonging to the contractor). This shall also cover the risk of damages to other's materials / equipment/properties including those, if any of the banks during construction / erection/commissioning of the said contract work at site. The value of third party liability for compensation for loss of human life or full / partial disablement shall be of required statutory value for full and partial disablement and shall nevertheless cover such compensation as may be awarded by a court of law. Cover for damage to other's equipment / property shall be as approved by the bank. The sub-contractors of the contractor shall not be holders or beneficiaries in the policy nor shall they be named in the policy. The bank shall be the principal holder of the policy along with the contractor. The bank reserves the exclusive right to assign the policy.

The Contractor shall indemnify the Employer against all claims which may be made against the Employer by any member of the public or other third party in respect of anything which may arise in respect of the works or in consequences thereof and shall at his own expenses arrange to effect and maintain, until the virtual completion of the contract, with an approved office a policy of insurance in the joint names of the Employer and the Contractor against such risks and deposit such policy or policies with the Architect from time to time during the currency of this contract. The Contractor shall also similarly indemnify the Employer, against all claims which may be made upon the Employer whether under the Workmen's Compensation Act or any other statute in force during the currency of this contract or at common law in respect of any employee of the Contractor or any Sub-Contractor and shall at his own expenses effect and maintain, in the joint names of the Employer and the Contractor against such risks and deposit such policy or policies with the Architect from time to time during the currency of the Contract.

The Contractor shall be responsible for any liability which may be executed from the Insurance Policies above referred to and also for all other damage to any person, animal or property arising out of the incidental to the negligent or defective carrying out of this Contract, transit, storage, erection, testing & commissioning policy. He shall also indemnify the Employer in respect of any costs, charges or expenses arising out of any



claim or proceedings and also in respect of any award of compensation or damages arising therefrom.

The Employer shall be entitled to deduct the amount of any damage, compensation, costs, charges and expense arising of accruing from or in respect of any such claims or damage from any or all sums due or to become due to the Contractor without prejudice to the Employer's other rights in respect thereof. The Contractor shall at his own expense, arrange to effect and maintain (until the virtual completion of the contract) with an approved office the following insurance policy in the joint name of the employer and himself with the employer being first (The Principal) and deposit such policy or policies with the employer from time to time during the currency of this contract.

25. **Insurance:** The contractor shall, before commencement of the work, insure the works at his cost and keep them insured until the virtual completion of reworks, against loss or damage by fire with an office **in the joint names of the employer and the contractor (the name of the former being placed first in the policy) for the full amount of the contract.** Such policy shall cover the property of the "Employer" only. **The contractor shall deposit the policy and receipts for the premium with the employer before commencement of the work.** In default of the contractor, insuring as provided above, the employer may so insure the works and may deduct the premium paid from any moneys due or which may become due to the Contractor without prejudice to the other rights of the Employer in respect of such default. In case it becomes necessary to suspend the works, the Contractor shall as soon as the claim under the policy is settled, or the work reinstated by the Insurance Office, should they elect to do so, proceed with all due diligence with the completion of the works in the same manner as though the fire had not occurred and in all respects under the same conditions of Contract. The Contractor in case of rebuilding or reinstatement after fire shall be entitled to such extension of time for completion as deems fit.
26. **Date of commencement and completion:** The Contractor shall be allowed admittance to the site on "Date of Commencement" stated in the Appendix hereto, or each later date as may be specified by the Employer and be shall thereupon and forthwith begin the works and shall regularly proceed with and complete the same (except such painting or other decorative work as the bank may desire to delay) or before the "Date of Completion" stated in the Appendix subject nevertheless to the provisions for extension of time hereinafter contained.
27. **Damages for non-completion:** If the Contractor fails to complete the works by the date stated in the Appendix or within any extended time under Clause 26 and 20 here the Contractor shall pay the Employer the sum named in the Appendix as "Liquidated Damages" for the period during which the said works shall so remain incomplete and the Employer may deduct such damages from any money due to the Contractor.



28. **Delay and extension of time:** If in the opinion of the Employer the works be delayed (a) by force majeure or (b) by reason of any exceptionally inclement weather or (c) by reason of proceedings taken or threatened by or dispute with adjoining or neighbouring owners or public authorities arising otherwise than through contractor's own default or (d) by the works or delays of other contractor or Tradesmen engaged or nominated by the Employer and not referred to in the schedule of quantities and/or specifications or (e) by reasons of Bank's Engineer instruction as per clause 11 & 17 hereof (f) by reason of civil commotion, local combination of workmen or strike or lockout affecting any of the building trades or (g) in consequence of the Contractor not having received in due time necessary instructions from the Bank for which he shall have specifically applied in writing or (h) from other causes which the Bank may certify as beyond the control of contractor or (i) in the event, the value of the work exceeded the value of the Priced Schedule of Quantities owing to variation, the Bank may make a fair and reasonable extension of time for completion as soon as may be given written notice thereof to the bank but the Contractor shall nevertheless constantly use his endeavours to prevent delay and shall do all that may reasonably has required to the satisfaction of Bank to proceed with work.
29. **Contractor's failure to comply with the Employer's instruction:** If the Contractor after receipt of written notice from the Employer requiring compliance within 10 days fails to comply with such further drawings and/or Bank's instructions, the Employer may employ and pay other persons to execute any such work whatsoever that may be necessary to give effect thereto, and all costs incurred in connection therewith shall be recoverable from the Contractor by the Employer as a debt or may be deducted by him from any moneys due to the Contractor.
30. **Termination of Contract by the Employer:** If the Contractor being an individual or a firm commits any "act of insolvency" or shall be adjudged an insolvent or being an incorporated company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up voluntarily or subject to the supervisions of the court and the Official Assignee or the Liquidator in such acts of insolvency or winding up, as the case may be, shall be unable within seven days after notice to him requiring him to do so to show the reasonable satisfaction of the Architect that he is able to carry out and fulfill the Contract and to given security therefore, if so required by the Architect.

Or if the Contractor (whether an individual, first or incorporated company shall suffer execution or other process of court attaching property to be issued against the Contractor.

Or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the Contractors.

Or shall assign to sublet this Contract without the consent in writing of the Employer first had and obtained.



Or shall charge or encumber this Contract or any payments due or which may become due to the Contractor hereunder.

- (i) Has abandoned the Contract, or
- (ii) Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progresses of the works for fourteen days after receiving from the Bank notice to proceed or
- (iii) Has failed to proceed with the work with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or
- (iv) Has failed to remove materials from the site or to pull down and replace work for seven days receiving from the Bank written notice that the said materials or work were condemned and rejected by the Bank's Engineer under these conditions' or
- (v) Has neglected or failed persistently to observe and perform all of any of the acts, matter or things by the Contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the Contractor requiring the Contractor to observe or perform the same.

Then and in any of the said cases the Employer may, notwithstanding any previous waiver, after giving seven days notice in writing to the Contractor, determine the Contract, the whole of which shall continue in force as fully as if the Contract has not been so determined and so if the works subsequently execute had been executed by or on behalf of the Contractor. And further, the Employer by his agents or servants may enter upon and taken possession of the works and all plant, tools scaffoldings, sheds, machinery, steam and other power utensils and materials lying upon the premises or the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the work or by employing any other Contractor or other person or persons to complete the works and the Contractor shall not in any way interrupt or do any act matter or thing to prevent or hinder such other contractor or other person or persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient the Bank shall give a notice in writing to the Contractor to remove his/their surplus materials and plant and should the Contractor fail to do so within a period of fourteen days after receipt thereof by him / their the Employer may sell the same by public auction and give credit to the Contractor for the net amount realised. The employer shall thereafter ascertain and certify in writing under his hand what of the said plant and materials so taken possessions or by the Employer and the expenses or loss which the Employer shall have been put to in procuring the works to be completed and the amount. If any, owing the Contractor and the amount which shall be so certified shall thereupon be paid by the Employer to the Contractor or by the Contractor to the Employer, as the case may be and the Certificate of the Bank shall be final and conclusive between the parties.



31. **Termination of Contract by Contractor:** If this payment of the amount payable by the Employer under Certificate of the Bank's Engineer shall be in arrears and unpaid for thirty days after notice in writing requiring payment of the amount as aforesaid shall have been given by the Contractor to the Employer or if the Employer interferes with or obstructs the issue of any such Certificate or if the Employer shall repudiate the Contract or if the works be stopped for three months under the orders of the Architect or the Employer or by any injunction or other order of any court of Law, then and in any of the said cases the Contractor shall be in liberty to determine the Contract by notice in writing to the Employer, and he shall be entitled to recover from the Employer, payment for all works executed and for any loss he/they may sustain upon any plant or materials supplied or purchased or prepared for the purpose or the Contract.

In arriving at the amount of such payment the net rates contained in the Contractor's original Tender shall be followed or where the same may not apply valuation shall be made in accordance with **Clause 17** hereof.

32. **Certificates and Payments:** The Contractor shall be paid by the Employer from time to time by installments under interim Certificate to be issued by the Bank's Engineer on account of the works executed to the approximate value named in the Appendix as 'Value of work for Interim Certificate' has been executed in accordance with this Contract, subject, however, to a retention of the percentage of such value named in the Appendix as "Total Retention Money" after which time the installments shall be up to the full value of the work subsequently so executed and fixed in the building. And when the works have been virtually completed, the Contractor shall be paid by the Employer in accordance with the Certificate to be issued by the Bank's Engineers, the sum of money named in the Appendix as "installment after Virtual Completion" being a part of the said Total Retention Money. And the Contractor shall be entitled to the payment of the Final Balance in accordance with the final Certificate at the expiration of the period referred to as 'the Defects Liability Period' in the Appendix hereto from the date of virtual completion or as soon as after expiration of such period as the works shall have been finally completed and all defects made good according to the true intent and meaning hereof whichever shall last happen provided always or at or after their completion shall not relieve the Contractor from his liability under **clause 21 and 36**, nor relieve the Contractor of his inability in cases of fraud, dishonesty or fraudulent concealment relating to the works or materials or to any matter dealt with in the Certificate and in case of the defects and insufficiencies in the works or materials which a reasonable examination would not have disclosed.

The Employer shall have power to withhold any Certificate if the works or any parts thereof are not being carried out to his satisfaction.

33. **Delayed Payment:** Any amounts payable by the Employer to the Contractor shall, if not paid within the 'period of honouring Certificates' names in the Appendix carry interest at



the rate named in the Appendix as the "Rate of interest for delayed payment" from the date upon which sum ought to have been paid by the Employer until the payment.

34. The decision, opinion, direction Certificate (except for payment) with respect to all or any of the matters under Clauses 2(a,b), 4,5, 14, 20 (a,b,c,d and f) hereof (which matters are herein referred to as the excepted matters) shall be final and conclusive and binding on the parties hereto and shall be without appeal. Any other decision, opinion, direction, shall be subject to the right of Arbitration and review under the Clause 35 hereof in the same way in all respects (including the provisions as to opening the reference).
35. **Settlement of disputes by Arbitration:** All disputes and differences of any kind whatever arising out of or in connection with the contract or the carrying out of the works (whether during the progress of the works or after their completion and whether before or after the determination abandonment or breach of the contract) shall be referred to and settled by the Bank who shall state its decision in writing. Such decision may be in the form of a final certificate or otherwise. The decision of the Bank with respect to any of the excepted matters shall be final and without appeal as stated in Clause 33 hereof. But if either the Contractor be dissatisfied on any matter on which a decision is taken by the Bank as above, except any of the excepted matter the Contractor may within 28 days after receiving notice of such decision give a written notice to the other party requiring that the matters in dispute be arbitrated upon. Such written notice shall specify the matters, which are in dispute or difference of which such written notice has been given. If both the parties agree, a single arbitrator would be appointed for the purpose. In case no agreement could be reached on the appointment of single arbitrator, both the parties will nominate one person each as an arbitrator on their behalf. The two arbitrators nominated by the parties shall nominate one more person to act as third arbitrator or umpire.

The arbitrator or Arbitrators, as the case may be, shall have power to open up, review and revise any certificate, opinion, decision, requisition or notice, save in regard to the excepted matters, referred to in the preceding clause and to determine all matters to dispute which shall be submitted to arbitration and of which notice shall have been given as aforesaid.

The arbitrator or Arbitrators, as the case may be, shall make his or their award within one year (or such further extended time as may be decided by him or them as the case may be with the consent of the parties) from the date of entering on the reference. In case during the arbitration proceedings the parties mutually settle or compromise their dispute or difference, on the parties filing their joint memorandum of the settlement or compromise, the Arbitrator or the Arbitrators as the case may be, shall make an award in terms of such settlement or compromise.

Upon any such reference, the decision on the cost incidental to the reference and Award respectively shall be in the discretion of the arbitrator or Arbitrators as the case may be, who may determine the amount thereof or direct the same to be taxed as between the party



and party, and shall direct by whom and to whom and in what manner the same shall be borne and paid.

This submission shall be deemed to be a submission to arbitration within the meaning of the Indian Arbitration and Conciliation Act, 1996 or any statutory modification thereof.

The award of the arbitrator or Arbitrators, as the case may be, shall be final and binding on the parties. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or dispute being referred to arbitration, but shall proceed with the works with all due diligence and shall until the decision of the Arbitrator or Arbitrators, as the case may be, is given, abide by the decision of the Bank. No award of the Arbitrator or Arbitrators, as the case may be, shall relieve the Contractor of his obligations to adhere strictly to the Bank's instructions with regard to the actual carrying out of the works. The Employer and the Contractor hereby also agree that arbitration under this Clause shall be a condition precedent to any right of action under the Contract.

36. Right of technical scrutiny of final bill

The Employer shall have a right to cause a technical examination of the works and the final bill of the contractor including all supporting vouchers, abstracts, etc. to be made at the time of payment of the final bill. If as a result of this examination of otherwise any sum is found to have been overpaid or over certified it shall be lawful for the employer to recover the sum.

37. Employer entitled to cover compensation paid to workman

If, for any reason, the Employer is obliged, by virtue of the provisions of the Workmen's Compensation Act, 1923, or any statutory modification or re-enactment thereof to pay compensation to a workman employed by the Contractor in execution of the works, the Employer shall be entitled to recover from the Contractor the amount of compensation so paid and without prejudice to the rights of the Employer under the said Act. The Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by the Employer shall not be bound to contest any claim made against it under the said Act, except on the written request of the Contractor and upon his giving to the Employer full security to the satisfaction of the Employer for all costs for which the Employer might become liable in consequence of contesting such claim.

38. Abandonment of works

If at any time after the acceptance of the tender, the Employer shall for any reasons whatsoever not requires the whole or any part of the works to be carried out, the Bank shall give notice in writing to the Contractor who shall have no claim to any payment of compensation or other-wise whatsoever on account of any profit or advantage which he might have derived from the execution of the whole works.



39. Return of surplus materials

Notwithstanding anything to the contrary contained in any or all the clauses of this Contract, where any material for the execution of the Contract is procured with the assistance of the Employer by purchase made under orders or permits or licenses issued by Government, the Contractor shall hold the said materials economically and solely for the purpose of the Contract and not dispose of them without the prior written permission of the Employer and return it to the Employer, if required by the Employer, at the price to be determined by the Bank having due regard to the conditions of the materials, the price to be determined not to exceed the purchase price thereof inclusive of sales tax, octroi and other such levies paid by the Contractor in respect thereof, in the event of breach of the aforesaid condition, the Contractor shall in addition to being liable to action for contravention of the terms of licenses or permit and / or criminal breach of trust, be liable to Employer for all moneys, advantages or profits resulting or which in the usual course would have resulted to his by reason of such breach.

40. Right of employer to terminate contract in the event of death of Contractor or individual

Without prejudice to any of the rights or remedies under this Contract, if the Contractor, being an individual, dies, the Employer shall have the option of terminating the contract without incurring any liability for such termination.

41. Non-disclosure Clause

The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure / systems/ equipment, etc., which may come to the possession or knowledge of the Contractor during the course of discharging its contractual obligations in connection with this agreement, to any third party and shall at all times hold the same in strictest confidence. The Contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The Contractor shall not publish, permit to be published or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The Contractor shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the Contractor and the Employer shall be entitled to claim damages and pursue legal remedies.

42. Sexual Harassment of women at work place

- a) The contractor shall be solely responsible for full compliance with the provisions of “the Sexual Harassment of women at work place (Prevention, Prohibition and Redressal) Act, 2013”. In case of any complaint of sexual harassment against its employee within the premises of the Bank, the complaint will be filed before the Internal Complaints Committee constituted by the contractor / Agency and the contractor.



- b) Any complaint of sexual harassment from any aggrieved employee of the Service Provider against any employee of the Bank or any employee of any other firm working in the Bank shall be taken cognizance of by the Regional Complaints Committee constituted by the Bank.
- c) The contractor shall be responsible for any monetary compensation that may need to be paid in case the incident involves the employees of the contractor, for instance any monetary relief to the Bank's employee or other firm's employee, if sexual violence by the employee of the contractor is proved.
- d) The contractor shall be responsible for educating its employees about prevention of sexual harassment at workplace and related issues.
- e) The contractor shall provide a complete and updated list of its employees who are deployed within the Bank's premises.



Section V

Special conditions

1. The workmen will not be allowed to stay within the premises.
2. The electric power required for the work can also be similarly drawn from the supply available at site free of cost.
3. Permission, if any, required from the local bodies shall be obtained by the Contractor.
4. The intending tenderer can obtain any clarifications regarding the Tender drawings, specifications, etc., from the Estate Cell, RBSC on any of the Bank's working day
5. The tenderer may please note that, the work has to be carried out during the day time or as per the Bank's instructions. Therefore, the entire work involved shall be carried out with least disturbance to the staffs / occupants of the office / colony and also day-to-day cleaning has to be done by the contractor. The wall / slab / column should be cut by chase cutter only.
6. The contractor shall prepare a copy of **as done drawings** after completion of the work and shall submit along with the final bill.
7. The entire materials for the work shall be brought to the working area through the staircase and no freight lift will be available for lifting the materials.
8. The debris / dust or any wastage generated out of the above work shall be cleaned as frequently as required and as instructed by the Bank's Engineer.
9. All dismantling work and work generating noise shall be done during the day time and holidays and the day time work shall have to be done on restricted hours. Contractor has to made availability of supply during the Evening & night time. Contractor shall take into account the above facts while quoting the rates.
10. The tenderer shall remove all the debris collected at site (from the Bank's premises) on everyday basis. The staircase and passages used by the laborers shall be cleaned properly, as per the entire satisfaction of the Bank's Engineers.
11. The contractor shall depute qualified supervisor during execution of the work. No work shall be carried out at site in an unsupervised manner.
12. The tenderer shall use only approved brands of materials.



Section VI
Appendix Hereinbefore Referred

1.	Defects liability Period	12 months from the date of issue of virtual completion certificate.
2.	Period of final measurement	01 month from the date of final commissioning.
3.	Date of commencement	10 th day from the date of award letter.
4.	Period of completion	02 months from the 10 th day of work order
5.	Liquidated Damages (LD) for delay in completing the work.	0.25 % of the cost of work order i.e capital cost per week subject to a maximum of 10% of the contract amount.
6.	Value of work for Interim Certificate for running bill	Rs.8 Lakhs.
7.	Period for honouring certificates of payment	30 days for Running Account (RA) bills and 45 days for Final bill.
8.	Interest for delayed payment	3 percent per annum

Seal & Signature of Contractor



Section VII

Technical details of Fire Alarm System

Description

This section of the specification includes the Design, Supply, installation, testing, commissioning and handing over of an intelligent analogue addressable fire alarm system required to form a complete, operative, coordinated system for the **New hostel building (Kurunji) and 'B' block (Neithal)** of the Reserve staff college, Tyenampet, Chennai. It shall include, but not be limited to, alarm initiating devices, alarm notification appliances, control panels, auxiliary control devices, annunciators, power supplies etc. as specified herein. **It is informed that there is an existing addressable fire alarm system as well as all devices connected to it shall be replaced with new devices. New wiring / Cabling should be provided for all the proposed new devices and locations. However, the old cables shall be used as directed by Bank's Engineer at restricted locations / reusable locations.**

The fire alarm system shall comply with requirements of NFPA Standard No.72 for protected Premises signalling systems except as modified and supplemented by this specification. The system shall be supervised either electrically or by software-directed polling of field devices.

The system shall have the facility to connect an emergency voice alarm annunciation system including capability to interface/dial up analog communication lines, for transmission of pre-recorded messages.

Scope of work

The scope of work includes Design, Supply, installation, testing, commissioning and handing over of an intelligent **Analogue** addressable fire alarm system for the Bank's New hostel building at Teynampet, Chennai.

A new intelligent reporting, fire detection and alarm annunciation system shall be supplied and installed in accordance with the specifications and BOQ, after successful installation and testing of new fire alarm system, **replace the existing Fire Alarm Panel(s), Networked Graphic Control software and other devices.**

(A) Basic Performance

- (i) All signals from various type of devices shall be digitally encoded onto a looped multiplex communication system of appropriate class.
(Digitized electronic signals shall employ check digits or multiple polling).
- (ii) The devices shall be of low current, solid-state integrated circuits, and shall be powered from the central primary power.
- (iii) A single ground or open on any system signalling line circuit, initiating device circuit, or notification appliance circuit shall not cause system malfunction, loss of operating



power or the ability to report an alarm on other circuits.

- (iv) Alarm signals arriving at the main FACP shall not be lost following a power failure (or outage) until the alarm signal is processed and recorded.
- (v) Loop driven hooters shall be provided for automatic alarm annunciation. The strobe cum alarm hooter shall be loop powered or else shall draw independent power from the FACP or any centralized reliable source of power supply.

1. Basic System Functional Operation

When a fire alarm/trouble condition is detected and reported by one of the system initiating devices or appliances, the following functions shall immediately occur:

- 1) The System Alarm LED shall flash or the system trouble LED shall flash.
- 2) A local piezo-electric signal in the control panel shall sound.
- 3) The LCD display shall generate a Pop-Up to indicate all information associated with the fire alarm / trouble condition, including the type of alarm point and its location within the protected Premises.
- 4) Printing and history storage equipment shall log the information associated with the fire alarm control panel condition, along with the time and date of occurrence.
- 5) All system output programs including sounding of hooters assigned via control-by-event equations to be activated by the particular point in alarm/trouble condition shall be executed, and the associated system outputs (alarm notification appliances and/or relays) shall be activated.

2. FIRE DETECTION & ALARM PANEL

- 1. The Panel shall be UL864/EN 54, listed and shall comply with latest standards of NFPA 72.
- 2. The panel shall be a Microprocessor based, Analogue addressable networkable and Intelligent.
- 3. The Panel shall have all necessary provisions for interfacing with BMS on MODBUS/BACNET protocols.
- 4. The Fire Alarm Control Panel / system shall be supplied with all required Hardware, Software, **Technical support, Software Development Key (SDK), Application Program Interface (API) to integrate the Fire Alarm System to the proposed Command and Control Centre through open communication protocol such as BACNET / Modbus / OPC / Ethernet etc. It should be compatible to integrate with Existing other building fire alarm system. Further, during alarm condition, the system should be compatible to give OFF (through NO/NC contact) signal to switch off the AHU of affected area.**
- 5. In the event of CPU failure, all signalling loop circuit (SLC), modules shall fall back to **degrade mode / redundancy panel shall be activated**. Such degrade mode shall treat the corresponding SLC Loop Control Module and associated detection devices as conventional two wire operation. Any activation of a detector in this mode shall automatically activate associated notification appliance circuits. ***In case the degrade***



mode in SLC is not available, a redundant CPU configuration in the main panel must be supplied.

6. The system shall support a detector response time to meet world annunciation requirements of less than 3 seconds.
7. The system shall be designed so that spare capacity of at least 20% in each loop is available for future expansion.

3.Main Fire Alarm Control Panel (MFACP) / Central console

The control panel shall be microprocessor based networkable system designed specifically for fire detection and alarm applications. The control panel shall include all required hardware, software and site-specific system programming to provide a complete and operational system. The control panel shall be designed such that interactions between any applications can be configured and modified. The control panel operational priority shall assure that life safety takes precedence among the activities coordinated by the control panel.

The Panel should be controlled by a Central Processing Unit (CPU). The CPU shall interface with all the loop cards which shall have its individual microprocessors for executing the functions of the fire alarm system. In case of failure of the CPU, a standby CPU should take over the functions of the main CPU without affecting requirements of the system.

Alternatively, in case the system design does not provide for online standby CPU, a Preloaded and Pre-programmed ready for use standby CPU should be provided to ensure normal and satisfactory operation of the system.

The Loop shall contain its own microprocessor and shall be capable of operating in a degraded **mode** (any addressable device input shall be capable of activating any or all addressable device outputs) in the unlikely event of a failure of the main CPU/standby CPU. In such eventuality, the hooter/alert device present in the Main FACP should always be activated.

The main FACP Central Console shall perform the following functions:

- (i) Supervise and monitor all intelligent/addressable detectors and monitor modules connected to the system for normal, trouble and alarm conditions.
- (ii) Supervise all initiating signaling and notification circuits throughout the facility.
- (iii) Detect the activation of any initiating device and the location of the alarm condition. Operate all notification appliances and auxiliary devices as programmed.
- (iv) Visually and audibly annunciate any trouble, supervisory or alarm, condition on operator's terminal, panel display, and annunciators.
- (v) Ability to disable whole/selectively the entire system or any one of the devices by manual intervention

3.1 System Capacity and General Operation

Fire Alarm panel shall be a multi-loop panel (exact number of loops as per schedule of quantity) and all the loop card should be of same size with a minimum capacity of 250 detectors/devices. It shall have a backlit minimum 640-character liquid crystal/LED display or touch screen, individual, colour coded system status LEDs, and alphanumeric keypad and control of the fire



alarm system, and the provision of internal / external printer.

The system shall be designed taking the following present requirement and expandability.

- (i) The fire alarm control panel shall include a full featured operator interface control and annunciation panel which shall include a backlit liquid crystal display, individual, color coded system status LEDs, and an alpha-numeric keypad for field programming and control of the fire alarm system.
- (ii) All programming or editing of the existing program in the system shall be achieved either from the control panel or from the PC without special equipment and without interrupting the alarm monitoring functions of the fire alarm control panel.
- (iii) The FACP shall provide the following features:
 - Block Acknowledge for Trouble Conditions
 - Rate Charger Control
 - Control-By-Time (Delay, Pulse, time of day, etc.)
 - Automatic Day/Night Sensitivity Adjust (high/low)
 - Device Blink Control (turn of detector LED strobe)
 - Drift Compensation
 - Smoke Detector Sensitivity Test
 - System Status Reports
 - Alarm Verification, by device, with tally
 - Multiple Printer Interface
 - Multiple CRT Display Interface
 - Non-Fire Alarm Module Reporting
 - Automatic Detector Test
 - Trouble Reminder
 - Upload/Download System Database to PC Computer
 - Walk Test
 - Smoke Detector Maintenance Alert
 - Security Monitor Points
 - On-line programming
 - Addressable Control Modules
 - Section Isolation Modules

The total number of loops in the system shall be based on the following criteria.

- (i) Each floor should constitute one loop each.
- (ii) There shall be spare capacity of at least 25% in each loop for future expansion.
- (iii) In each loop there shall be a provision for a minimum of 25 addressable output devices i.e. strobe cum hooters, output control modules/relays.

3.2 Central Processing Unit (CPU)

- (i) The Central Processing Unit shall communicate with, PC, monitor, and control all other modules within the control panel. Removal, disconnection or failure of any control panel module shall be detected and reported to the system display by the central processing unit.



- (ii) The CPU shall contain and execute all control-by-event programs for specific action to be taken if an alarm/trouble condition is detected by the system. Control-by-event programs shall be held in non-volatile programmable memory, and shall not be lost even if system primary and secondary power failure occurs.
- (iii) The Central Processing Unit shall also provide a real-time clock for time annotation of all system displays. The Time-Of-Day and date shall not be lost if system primary and secondary power supplies fail.
- (iv) The main FACP central console shall be designed so as to permit continued local operations under both normal and abnormal network communication loop conditions. This shall be obtained by operating as local control panels upon loss of network communication.
- (v) The FACP and CPU shall be modular in construction to allow ease of servicing. Systems which require use of external programmers or change of EPROMs are not acceptable.
- (vi) The CPU and associated equipment are to be protected so that they will not be affected by voltage surges or line transients including RFI and EMI.
- (vii) Each peripheral device connected to the CPU shall be continuously scanned for proper operation. Data transmissions between the CPU and peripheral devices shall be reliable and error free. The transmission scheme used should employ dual transmission or other equivalent error checking techniques. Failure of any peripheral device to respond to an interrogation shall be annunciated as a trouble condition.

3.3 Display

- (i) The system display shall provide all the controls and indicators used by the system operator and may also be used to program all system operational parameters.
- (ii) The display assembly shall contain, and display as required, custom alphanumeric labels for all intelligent detectors, addressable modules, and software zones.
- (iii) The system display shall provide a back-lit alphanumeric Liquid Crystal Display (LCD). It shall also provide 5 light-emitting-diodes (LEDs), which will indicate the status of the following system parameters: AC POWER, SYSTEM ALARM; SYSTEM TROUBLE, DISPLAY TROUBLE, and SIGNAL SILENCE.
- (iv) The system display shall provide a touch keypad with control capability to command all system functions, entry of any alphabetic or numeric information, and field programming. Two different password levels will be accessible through the display interface assembly to prevent unauthorized system control or programming.
- (v) The system display shall include the following operator control switches: SIGNAL SILENCE, LAMP TEST, RESET, SYSTEM TEST, and ACKNOWLEDGE, system disabled/device(s) disabled.

3.4 Loop Interface (Signaling Line Circuit) Board

- (i) The SLC board shall monitor and control intelligent addressable devices. This includes intelligent detectors (Ionization, Photoelectric, or Thermal) and monitor or control modules, sounders/probes.
- (ii) The SLC interface board shall contain its own microprocessor and shall be capable of



operating in a local/degrade mode (any addressable device input shall be capable of activating any or all addressable device outputs) in the event of a failure in the main CPU.

- (iii) The SLC interface board shall not require any jumper cuts or address switch settings to initialize operations.
- (iv) The SLC interface board shall provide power and communicate with all intelligent addressable detectors and modules on a single pair of wires.
- (v) The SLC interface board shall be able to drive a twisted shielded circuit up to 2500 feet in length. The SLC Interface shall also be capable of driving a no twist, no shield circuit up to 1000 feet in length. "T"-tapping shall be allowed in either case.
- (vi) The SLC interface board shall receive analog information from all intelligent detectors and shall process this information to determine whether normal, alarm, or trouble conditions exist for that particular device. The SLC interface board software shall include software to automatically maintain the detector's desired sensitivity level by adjusting for the effects of environmental factors, including the accumulation of dust in each detector. The analog information may also be used for automatic detector testing and the automatic determination of detector maintenance requirements.
- (vii) The SLC interface boards shall provide power to all the hooters provided in the loop for activation.

3.5 Serial Interface Board (SIB)

- (i) The Serial Interface Board shall provide the EIA-232 interface between the fire alarm control panel and Electronic Data Processing (EDP) peripherals.
- (ii) The SIB shall allow the use of multiple printers, CRT monitors, and other peripherals connected to the EIA-232 ports.
- (iii) The Serial Interface Board shall provide one EIA-485 port for the serial connection of the optional annunciator and control subsystem components.
- (iv) The SIB shall include LEDs which indicate that it is in regular communication with the annunciators and other EIA-485 connected peripheral devices.
- (v) All EIA-232 circuits shall be optically isolated and power limited.

3.6 Enclosures

- (i) The control panels shall be housed in cabinets suitable for surface or semi-flush mounting. Cabinets shall be corrosion protected, given a rust-resistant prime coat, and manufacturer's standard finish.
- (ii) The back box and door shall be constructed of 16 Gauge sheet steel with provisions for electrical conduit connections into the sides and top.
- (iii) The door shall provide a key lock and include a transparent opening for viewing all indicators. For convenience, the door shall have the ability to be hinged on either the right or left-hand side.
- (iv) The control unit shall be modular in structure for ease of installation, maintenance, and future expansion.

3.7 Power Supply

- (i) The power supply units shall operate on 240 Volts AC, 50Hz, and shall provide all necessary power for the FACP, notification appliances, alarm initiating device, control panel, auxiliary control devices and annunciation – logging, printing and display devices.



- (ii) In case of failure of main power supply the power supply unit shall draw power from a set of standby batteries. The capacity of the battery set shall be sufficient to meet 30 minutes full functioning of the complete system under alarm condition and at least 24 hours of quiescent conditions.
- (iii) It shall provide a battery charger using dual-rate-charging techniques for fast battery recharge. It shall be able to charge completely discharged batteries within a 12-hour period.
- (iv) It should provide meters to indicate battery voltage and charging current.
- (v) Earth wire shall also be provided with the power supply. Rectification of the input AC supply into DC and further stabilization of the voltage as may be necessary shall form part of the FAS equipment.

3.8 System Circuit Supervision

The FACP shall supervise all circuits to intelligent devices, transponders, annunciators and peripheral equipment and announce loss of communications with these devices. The CPU shall continuously scan above devices for proper system operation and upon loss of response from a device shall sound an audible trouble, indicate which device or devices are not responding and print the information in the history buffer and on the printer.

3.9 Operators Terminal

The operator terminal shall provide the following standard operator full system functions:

(i) Acknowledge (ACK/STEP) Switch

- Activation of the control panel Acknowledge switch in response to a single new Alarm and/or trouble condition shall silence the local panel piezo electric signal and change the system alarm or trouble LED from flashing mode to steady-ON mode. If additional Alarm or Trouble conditions exist or are detected and reported in the system, depression of this switch shall acknowledge and/or advance the 80-character LCD display to the next alarm or trouble condition.
- A common acknowledge switch for all events shall be used for ease of operation. Systems that utilize multiple acknowledge switches depending on the event are unacceptable.
- Depressing the acknowledge switch shall also silence all remote annunciator/piezo sounders

(ii) Signal Silence Switch

- Activation of the signal silence switch shall cause all alarm notification appliances and relays which are programmed to do so, to return to the normal condition after an alarm activation. The selection of notification circuits and relays which are silenceable by this switch shall be fully field programmable within the confines of all applicable standards.

(iii) System Reset Switch

- Activation of the system reset switch shall cause all electronically-latched initiating devices, appliances or software zones, as well as all associated output devices and circuits, to return to their normal condition.
- If an alarm condition(s) still exists, or if they reoccur in the system after system reset switch activation, the system shall then resound the alarm conditions.

(iv) System Test Switch

- Activation of the system test switch shall initiate an automatic test of all



Analog/Addressable detectors in the system. The system test shall activate the electronics in each analog addressable sensor, simulating an alarm condition and causing the transmission of the alarm condition from that sensor to the fire alarm control panel. The fire alarm control panel shall interpret the data from each sensor installed in the system. A report summarizing the results of this test shall be displayed automatically on the control panel LCD, and on any CRTs or printers in the system. This report shall display the number of detectors tested per SLC/loop, the total number tested in the system, any detector that failed, or an all "Tested OK" message. Also included shall be a time/date stamp of when the test was performed.

(v) Lamp Test Switch

- Activation of the lamp test switch shall sequentially turn on all LED indicators, system liquid crystal display and local piezo signal, and then automatically return the fire alarm control panel to the previous condition.

3.10 Video Display Terminal

- (i) The Video Display Terminal shall provide a visual display and an audible alert of all changes in status of the system and shall annotate such displays with the current time-of-day and date.
- (ii) The Video Display Terminal shall be enclosed in a cabinet suitable for placement on a desk top or table.
- (iii) A detachable keyboard shall be provided that may be used for programming, testing, read status and control of the system. Individual stamped keys shall be provided on the keyboard for the ACKNOWLEDGE, RESET, LAMP TEST, SYSTEM TEST, READ STATUS, ALTER STATUS, PROGRAMMING and SIGNAL SILENCE functions of the control panel.
- (iv) The video display terminal shall include a count of all alarms and troubles in the system, as well as a count of all alarms and trouble requiring acknowledgment. These counts shall be continuously displayed during all FACP operations.

3.11 Field Programming

- (i) The system shall be programmable, configurable and expandable in the field without the need for special tools, laptop computers or electronic interface equipment. There shall be no firmware changes required to field modify the system time, point information, equations, or annunciator programming/information.
- (ii) It shall be possible to program through the standard FACP keyboard all standard functions.
- (iii) All field defined programs shall be stored in non-volatile memory.
- (iv) Two levels of password protection shall be provided in addition to a key-lock cabinet. One level shall be used for status level changes such as point/zone disable or manual on/off commands (Building Manager). A second (higher-level) shall be used for actual change of the life safety program (installer). These passwords shall be five (5) digits at a minimum. Upon entry of an invalid password for the third time within a one minute time period an encrypted number shall be displayed. This number can be used as a reference for determining a forgotten password.



- (v) The system programming shall be "backed" up on a **pendrive / CD utilizing** an upload/download program. This system back-up disk /pendrive shall be completed and given in duplicate to the building owner and/or operator upon completion of the final inspection. The program that performs this function shall be "**non-proprietary**", in that, it shall be possible to forward it to the building owner/operator upon his or her request.
- (vi) The installer's field programming and hardware shall be functionally tested on a computer against known parameters/norms which are established by the FACP manufacturer. A software program shall test Input-to-Output correlation, device Type ID associations, point associations, time equations, etc. This test shall be performed on a PC with a verification software package. A report shall be generated of the test results and two copies turned in to the engineer(s) on record.

3.12 Specific System Operations

- (i) Smoke Detector Sensitivity Adjust: Means shall be provided for adjusting the sensitivity of any or all analog intelligent smoke detectors in the system from the system keypad or from the keyboard of the video terminal.
- (ii) Alarm Verification: Each of the intelligent addressable smoke detectors in the system may be independently selected and enabled to be an alarm verified detector. The FACP shall keep a count of the number of times each detector has entered the verification cycle. These counters may be displayed and reset by the proper operator commands.
- (iii) System Point Operations
 - Any device in the system may be enabled or disabled through the system keypad or video terminal.
 - Any system output point may be turned on, or off, from the system keypad or the video terminal.
- (iv) Point Read: The system shall be able to display the following point status diagnostic functions without the need for peripheral equipment. Each point will be annunciated for the parameters listed:
 - Device Status.
 - Device Type.
 - Custom Device Label.
 - Software Zone Label.
 - Device Zone Assignments.
 - Detector Analog Value.
 - All Program Parameters.
- (v) System Status Reports: Upon command from a password-authorized operator of the system, a status report will be generated, and printed, listing all system statuses.
- (vi) System History Recording and Reporting: The fire alarm control panel shall contain a History Buffer that shall be capable of storing up to 2000 system events. Each of these events will be stored and time and date stamped with the actual time of the activation, until an operator requests that the contents be either displayed or printed. The contents of the History Buffer may be manually reviewed, one event at a time, and the actual number of activations may also be displayed and or printed. The history buffer shall use non-volatile memory. Systems which use volatile memory for history storage are not acceptable



(vii) Automatic Detector Maintenance Alert: The fire alarm control panel shall automatically interrogate each intelligent system detector and shall analyze the detector responses over a period of time. If any intelligent detector in the system responds with a reading that is below or above normal limits, then the system will enter the Trouble Mode, and the particular Intelligent Detector will be annunciated on the system display, and printed on the optional system printer. This feature shall in no way inhibit the receipt of alarm conditions in the system, nor shall it require any special hardware, special tools or computer expertise to perform.

(viii) The system shall include the ability (programmable) to indicate a "pre-alarm" condition. This will be used to alert maintenance personnel when a detector is at 80% of its alarm threshold

The panel shall maintain a history file of the last 2000 events, each with a time and date stamp. History events shall include all alarms, troubles, operator actions, and programming entries. The control panels shall also maintain a 1000 event Alarm History buffer, which consists of the 1000 most recent alarm events from the 2000-event history life.

The loop interface board shall be able to drive an NFPA Style 6 twisted shielded circuit up to 5280 feet in length. The loop Interface shall also be capable of driving an NFPA Style 6, no twist, no shield circuit up to 5280 feet in length. In addition, loop wiring shall meet the listing requirements for it to exit the building or structure. "T"-tapping shall be allowed in either case.

The FAS shall have pre-signal and Positive Alarm Sequence that is the system shall provide means to cause alarm signals to only sound in specific areas with a delay of the alarm from 60 upto 180 seconds after start of alarm processing. The system shall support a detector response time to meet word annunciation requirements of less than 3 seconds.

To obtain early warning of incipient or potential fire conditions, the system shall support a programmable option to determine system response to real-time detector sensing values above the programmed setting. Two levels of Pre-alarm indication shall be available at the control panel: alert and action.

The system shall provide means to allow panel programming either through an off-line software utility program away from the panel or while connected and on-line. The system shall also support upload and download of programmed database and panel executive system program to a Personal Computer/laptop.

The system shall support two password levels, master and user. Up to 09 user passwords shall be available, each of which may be assigned access to the programming change menus, the alter status menus, or both. Only the master password shall allow access to password change screens.

The system shall provide means to link one detector to up to two detectors at other addresses on the same loop in cooperative multi-detector sensing. There shall be no requirement for



sequential addresses on the detectors and the alarm event shall be a result or product of all cooperating detectors chamber readings.

The FAS shall be networkable in a peer to peer style and shall be able to communicate with other network nodes at a minimum speed of 3Mbps on copper. It shall be able to build a network on copper or fibre optics.

Remote monitoring: The system should be provided with a remote monitoring/repeater panel with all necessary cabling and connectivity.

The panel shall preferably mimic all the functions provided in the local onsite control panel including providing audible and visual annunciations.

4. FIRE ALARM SYSTEM DEVICES

4.1 General

1. Each device shall be UL 864 latest edition/ EN 54 Listed.
2. Addressable devices shall use simple to install and maintain decade, decimal address switches. Devices shall be capable of being set to an address in a range of 001 to 250. Devices shall receive power and communication from the same pair of conductors of the SLC.
3. The contractors shall not install the detectors until after the construction clean-up of all trades is complete and final.
4. Initiating devices shall be installed in all areas, compartments, or locations where required by other NFPA codes and standards or as required by the authority having jurisdiction.
5. In the event of duplicate addressing of a device, the fire panel shall indicate this as a fault condition. However, the SLC should continue to function normally with the trouble condition display at the Fire panel.
6. Each addressable detector & device shall respond to Fire Alarm Panel scan for information with an analogue representation of measured fire related phenomena (smoke density, particles of combustion, temperature).
7. The standard base of the Detector shall be interchangeable with other Smoke/Heat/Multi criteria Detectors.
8. Using software in the FACP, detectors shall automatically compensate for dust accumulation and other slow environmental changes that may affect their performance. The detectors shall be listed by UL864 Latest edition / EN54 as meeting the calibrated sensitivity test requirements of NFPA Standard 72.
9. Addressable devices shall use simple to install and maintain type address switches / **digitally programmable from FAS panel / software.**
10. **In case Isolation feature is not available within the detector, the cost for Isolation module should be included in the system cost. No separate payment will be made for this item.**

5. INITIATION DEVICES



5.1 Intelligent Multi Criteria Detector with floating sensitivity

The intelligent multi criteria detector shall be an addressable device that is designed to monitor a minimum of photoelectric and thermal technologies in a single sensing device. The design shall include the ability to adapt to its environment by utilizing a built-in microprocessor to determine its environment and choose the appropriate sensing settings automatically i.e have floating sensitivity. The detector design shall allow a wide sensitivity window as per UL 864 LATEST EDITION / EN 54 standards. This detector shall utilize advanced electronics that react to slow smoldering fires and thermal properties all within a single sensing device. It shall be capable of operation in heat-only alarm mode, enabled by a special command from the panel.

The microprocessor design shall be capable of selecting the appropriate sensitivity levels based on the environment type it is in (office, manufacturing, kitchen etc.) and then have the ability to automatically change the setting as the environment changes (as walls are moved or as the occupancy changes).

The intelligent multi criteria detection device shall include the ability to combine the signal of the thermal sensor with the signal of the photoelectric signal to react hastily in the event of a fire situation. It shall also include the inherent ability to distinguish between a fire condition and a false alarm condition by examining the characteristics of the thermal and smoke sensing chambers and comparing them to a database of actual fire and deceptive phenomena.

The minimum coverage per Multisensor Detector shall be 50 M.Sq. This coverage area will reduce depending upon structural configurations or partitions etc as per NFPA 72, Chapter 5. It shall be possible to connect this multi criteria sensor Detector with Heat Detector or Manual Push Buttons in the same SLC.

The sensitivity of Detector shall be adjusted and set by the contractor to suit the site requirement. The location of smoke detectors shall be based on an evaluation of potential ambient sources of smoke, moisture, dust, or fumes, and electrical or mechanical influences to minimize nuisance alarms. The selection and placement of smoke detectors shall take into account both the performance characteristics of the detector and the areas into which the detectors are to be installed to prevent nuisance alarms or improper operation after installation. As per NFPA 72, Chapter 5, smoke detectors shall not be installed if the ambient conditions are any of the four - Temperature below 0°C (32°F), Temperature above 38°C (100°F), Relative humidity above 93 percent, Air velocity greater than 1.5 m/sec (300 ft/min).

Multicriteria sensor shall have a nominal sensitivity of 2.0% foot obscuration or better.

5.2 Addressable Heat Detectors

The Heat Detector shall be an Addressable Detector with its own manually set digital code and shall be able to give a single digitized output to the Fire Alarm Panel regarding its condition. Heat detectors shall be rated at 135 degrees Fahrenheit (58 degrees Celsius) and have a rate-of-rise element rated at 15 degrees Fahrenheit F (9.4 degrees C) per minute. It shall connect via two wires to the fire alarm control panel signaling line circuit.



It shall be able to withstand temperature variations from 0°C to 38°C. Further, relative Humidity (non-Condensing type) up to 93% shall not hamper its performance. The Voltage rating shall be from 17 V DC to 28 V DC, though the voltage may be changed depending upon the working voltages of a proprietary Fire Alarm Panel. The Detector shall meet the requirements of NFPA 72 and shall be listed with UL. The approved coverage per Detector for unhampered areas shall not be less than 30 sq. M. The detector shall be capable of being reset automatically after any alarm condition.

5.3 Addressable Manual Call Point

Manual Call Point shall be of the dual action design. Addressable manual fire alarm boxes shall, on command from the control panel, send data to the panel representing the state of the manual switch and the addressable communication module status. They shall use a **key operated test-reset lock**, and shall be designed so that after actual emergency operation, they cannot be restored to normal use except by the use of a key.

All operated stations shall have a positive, visual indication of operation and utilize a key type reset.

Manual fire alarm boxes shall have clearly visible operating instructions provided on the cover. The word 'FIRE' shall appear on the front of the stations in raised letters 1.75 inches or larger.

6. NOTIFICATION DEVICES

6.1 Strobe cum Alarm Hooters

Strobe cum Alarm hooters/sounders shall be suitable for indoor applications. All hooters shall be 24 V DC operated. The minimum sound level shall be 80 dB at 10 feet. Listed to UL 864/EN 54. Strobe cum Alarm hooters shall be wired as a primary signalling notification appliance.

The strobe shall flash at 01 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The maximum pulse duration shall be 2/10 of one second. Strobe intensity & flash rate shall meet the requirement of approved agencies. The hooter shall have two tone options, two audibility options (at 24 volts) and the option to switch between a temporal 3 pattern and a non-temporal continuous pattern. **Strobes shall be powered independently of the sounder.** The horn on horn/strobe shall operate on a non-coded power supply. It shall be complete with electronic oscillations, magnetic coil (sound coil) and accessories ready for mounting (fixing).

The strobe cum alarm hooter shall be loop powered or else shall draw independent power from the FACP or any centralized reliable source of power supply. Making arrangement for the power cable and power supply units for this purpose shall within the scope of SITC of strobe cum alarm hooters and shall not be paid separately.



In case of separately powered Hooters **the status of the power supply at each strobe cum hooter level should be monitored continuously and in case of any power interruption it should initiate alarm / alert at FACP and repeater panels.**

6.2 Response Indicator

These are LEDs to be connected in parallel with the detectors fixed inside a closed cabin. In case of fire detection by the particular detector, the corresponding LED should glow.

7. MODULES

7.1 Fault Isolator Device / module

A wire-to-wire short circuit fault on any circuit or device, before or after the circuit or device has been activated, shall initiate a trouble signal and shall isolate that circuit or device from the rest of the system. The Fault Isolator Device shall detect and isolate a short-circuited segment or device of a fault-tolerant loop. The fault isolator device shall automatically determine a return to normal condition of the loop and restore the isolated segment. In case of open circuits, it shall be possible to isolate a section by a command from the control panel. The isolator module shall not require any address-setting, and its operations shall be totally automatic. It shall not be necessary to replace or reset an isolator module after its normal operation. The isolator module shall mount in a standard suitable size electrical box or in a surface mounted back box. It shall provide a single LED that shall flash to indicate that the isolator is operational and shall illuminate steadily to indicate that a short circuit condition has been detected and isolated.

The Fault isolators shall be provided in the loop as per manufacturers /UL/EN standard requirement for each detector/device. **The fault isolator should be part of the system and should not be separately quoted.**

7.2 Addressable Control and relay Module

- (i) Addressable control modules shall be provided to supervise and control the operation of one conventional Notification Appliance Circuit (NACs) of compatible 24 VDC powered, polarized audio / visual notification appliances. For fan shutdown and other auxiliary control functions, the control module may be set to operate as a dry contact relay. Existing fan / electric panel integration is in vendors scope including compatibility checks, wirings etc
- (ii) The control module shall mount in a standard suitable size square, 2-1/8 inch deep electrical box or to a surface mounted back box.
- (iii) The control module NAC may be wired for up to 1 amp of inductive A/V signal or 2 amps of resistive A/V signal operation, or as a dry contact (Form C) relay. The relay coil shall be magnetically latched to reduce wiring connection requirements and to ensure that 100% of all auxiliary relay or NAC, may be energized at the same time on the same pair of wires.
- (iv) The central module shall be suitable for pilot duty application and rated for a minimum of 0.6 amps at 30 VDC.



8.0 Fire alarm Repeater /Annunciator Panel

The Repeater Panel shall be with minimum suitable display or touch screen to indicate the status of system and location of incident which shall mimic the main fire alarm panel. It shall be supervised, remotely located and shall have a 2x40 character back lit alphanumeric LCD display which shall display date, time & description of alarm/trouble events. It shall have an on-board input, output, and status indicators to support diagnostics. It shall display all alarm and trouble conditions in the system. The Repeater panel shall be UL 864/EN 54 Listed. The Repeater Panel shall be capable of a wiring distance of up to 3300 feet from the main control panel using recommended cables. It shall have functional keys like Acknowledge, Signal Silence, System Reset, Lamp Test etc.

10.0. Batteries and battery charger

- a. Battery shall have sufficient capacity to power the fire alarm system **for not less than 30 minutes in alarm condition and at least 24 hours in normal condition.**
- b. The batteries are to be completely maintenance free. The battery shall be conforming to relevant Indian / International standard.
- c. The battery/ies shall be located in the same main fire alarm panel room.
- d. The power supply in the fire alarm panel shall be in-built automatic battery charger suitable to charge the batteries as per the requirements of relevant standard. The charger shall be complete with necessary voltmeter, ammeter, indicating lamps, fuses etc. It shall have protection from overloads and short circuits on both AC & DC sides. It shall have protection to prevent discharge through the charger.
- e. In case the inbuilt FAS panel DC power battery backup power is not sufficient. Then suitable sized UPS based AC power supply equipment with suitable sized battery backup for the specified duration in clause (a) shall be supplied by contractor. It shall be provided as main power supply for Fire alarm system incl. Fire alarm panel & NCS system, loops, hooters etc.

10.1 External battery charger

- (i) It shall be completely automatic, with constant potential charger maintaining the battery fully charged under all service conditions. Charger shall operate from a 230 Volt, 50 Hertz source.
- (ii) It shall be rated for fully charging a completely discharged battery within 12 hours while simultaneously supplying any loads connected to the battery.
- (iii) It shall have protection to prevent discharge through the charger.
- (iv) It shall have protection for overloads and short circuits on both AC and DC sides.

11 Approvals

All the equipment shall have proper listing and/or approvals and shall comply to the requirements of the following recognized agencies.

- a) UL – Underwriters Laboratories Inc.
- b) EN 54 - European Standards
- c) IS 2189 – Indian Standard latest revision



12 Cables / conduits

All cables/conduits to be laid on wall, ceiling, below soil by excavation up to minimum two feet and refilling by the same excavated material and on the hangers wherever necessary and as directed by Bank's engineer with required hardware. The cables shall be RED coloured FRLS, armoured, PVC twisted 1.5 sq. mm multi stranded insulated, copper conductor cables, conforming to IS: 1554 and shall be of specified make. All the cables shall be properly supported by GI saddle spacers and hardware and terminated and labelled. All the drops on the wall must be concealed in PVC pipe and repairing of the wall thereafter. The work includes termination of all the cables using **brass saddles, copper thimbles** and **proper nomenclature tags for loop / device identifications**.

13 Execution

13.1 Installation

- (i) As the work is to be carried out in existing occupied building, the actual functioning of the existing fire alarm system cannot be put under shut down. Therefore, the execution of this work has to be meticulously planned and executed in consultation with site engineer and Fire officer in such a manner that fire safety of the building is not hampered.
- (ii) The work shall be taken for execution only after the entire material has been supplied at site.
- (iii) Before commencement of execution of work, the tenderer shall design the system and prepare the all the necessary drawings for the proposed new Fire alarm system and get the same approved from Bank. Reference Building hardcopy drawings alone will be provided; softcopy form / CAD drawings have to be prepared by vendor either by site survey or in reference with available hardcopy.
- (iv) Installation shall be in accordance with the NEC, NFPA 72, local and state codes, as shown on the drawings, and as recommended by the major equipment manufacturer.
- (v) All conduit, junction boxes, conduit supports and hangers shall be concealed in finished areas and may be exposed in unfinished areas as per Bank's direction.
- (vi) **Removing and re-fixing of the light fixtures / false ceiling tiles in order to access the area above the false ceiling for laying of cable and fixing of detectors etc., will be in the scope of this contract. No additional payment shall be made on this account. Any damage to the Bank's property shall be made good without any additional claim.**
- (vii) Smoke detectors shall not be installed prior to the system programming and test period. If construction is ongoing during this period, measures shall be taken to protect smoke detectors from contamination and physical damage.
- (viii) All fire detection and alarm system devices, control panels and remote annunciators shall be flush mounted when located in finished areas and may be surface mounted when located in unfinished areas.
- (ix) Addressable intelligent break-glass units (Manual call stations) shall be suitable for surface mounting or semi-flush mounting as existing, and shall be installed not less than **42 inches, nor more than 48 inches** above the finished floor.
- (X) The existing cables shall be used at locations as per the instructions of the Bank's Engineer.



13.2 Testing of the System

The contractor shall arrange and provide at no extra cost, the service of a competent, factory-trained engineer or technician authorized by the manufacturer of the fire alarm equipment to technically supervise and participate during all of the adjustments and tests for the system.

- (i) Before energizing the cables and wires, check for correct connections and test for short circuits, ground faults, continuity, and insulation.
- (ii) Open initiating device circuits and verify that the trouble signal actuates.
- (iii) Open signalling line circuits and verify that the trouble signal actuates.
- (iv) Open and short notification appliance circuits and verify that trouble signal actuates.
- (v) Ground initiating device circuits and verify response of trouble signals.
- (vi) Ground signalling line circuits and verify response of trouble signals.
- (vii) Ground notification appliance circuits and verify response of trouble signals.
- (viii) Check alert tone and pre-recorded voice message if any to all alarm notification devices.
- (ix) Check installation, supervision, and operation of all intelligent smoke detectors using walk test.
- (x) Each of the alarm conditions that the system is required to detect should be introduced on the system. Verify the proper receipt and the proper processing of the signal at the FACP and the correct activation of the control points.
- (xi) When the system is equipped with optional features, the manufacturer's manual should be consulted to determine the proper testing procedures. This is intended to address such items as verifying controls performed by individually addressed or grouped devices, sensitivity monitoring, verification functionality and similar.

13.3 Final Inspection

At the final inspection a factory trained representative of the manufacturer of the major equipment shall demonstrate that the systems function properly in every respect.

13.4 Instruction

- (i) Provide instruction as required for operating the system. "Hands-on" demonstrations of the operation of all system components and the entire system including program changes and functions shall be provided.
- (ii) The contractor and/or the systems manufacturer's representatives shall provide a typewritten "Sequence of Operation."

13.5 Guarantee

All work performed and all materials and equipments supplied under this contract shall be free from defects and shall remain so for a period of at least one year from the date of virtual completion and acceptance of his system. The full cost of maintenance, labour and materials required to correct any defect during this one-year period shall be included in the amount quoted.



13.6 Documentation

- (i) Sufficient information, clearly presented, shall be included to determine compliance with drawings and specifications.
- (ii) It should include manufacturer's name(s), model numbers, ratings, power requirements, **equipment layout**, device arrangement, complete point to point wiring diagrams, annunciators layouts and main control layout, configurations and terminations
- (iii) Complete operating and maintenance manuals including technical data sheets, brochures, Test certificates etc
- (iv) Provide a clear and concise description of operation which gives, in detail, the information required to properly operate the equipment and system
- (v) Four copies of the above documents in book form well bound should be submitted.

13.7 Standards to be followed

	The above system should follow the following Standards
	NFPA 318 (Standards on Critical Area and Clean room applications)
	NFPA 76 (Protection of Electronic Computer/Data Processing)
	NFPA 72 (Standards on Fire detection)
	NFPA 2001 (Standards on Gas Suppression)
	NFPA 101 (Standards on Life Saving)



List of approved makes

Sl.no	Description of item	Approved make
1	Fire Equipment: Control Nodes (Fire Alarm Control Panel, repeater panel, software etc.), Initiation devices (Smoke and thermal Detectors, Manual Call Points); Notification devices (hooter cum strobes etc.); Control / Relay Modules	Siemens, Honeywell (Esser, Morley, Notifier), Edwards, GE, Bosch, Tyco, Cooper
2	FRLS cables- Red colour	Finolex, CCI, Polycab
3	Batteries	Exide, Amaron, Panasonic

Note: OEM selected must have their service set up with full infrastructure in Chennai. A copy of the GST registration number must be uploaded along with the tender Part-I.



Offered Makes & Models (mandatory to be filled by tenderers)

Sl. No	Item	Offered Make	Offered Model
1.	Fire Alarm Control Panel		
2.	Repeater Panel		
3.	Multi sensor based smoke cum thermal detector		
4.	Rate of rise cum fixed temperature heat detectors		
5.	Dual action manual call point		
6.	Hooter cum strobe lights		
7.	Response Indicator		
8.	FRLS cable		
9.	Backup batteries		

The tenderers should upload the technical literature of all the above offered makes and models in part I of the tender.

The firm must have installed and commissioned at least one Fire Alarm Control panel of the above offered make and model. The details of such installation shall also be furnished.



Section VIII
Technical data to be furnished by the Tenderer

Tender for Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai.				
Bill of Quantities				
S.No.	Description	Tender Specs	Offered By Yes or NO	Remarks
1	Fire Alarm Control Panel (Minimum 01 Loop) as under, the FAS panel should have provision expandable upto additional 3 loops			
a	System capacity			
	Total no. of intelligent addressable Loops in panel	01		
	No.of addressable control modules per loop			
	No. of hooters per loop			
	Total addressable / intelligent devices per system			
	Total ACS / relay points per system			
	Remote ACS addresses per system			
	Display / relay points per ACS address			
	Remote printers per system			
	Remote CRT / keyboard terminals per system			
	Remote CRT / Monitor terminals per system			
	Keyboard and monitor	required		
	Printer interface	required		
b	Redundant CPU / panel to take over the functions of main CPU in the event of failure of main CPU	Required		
c	Minimum Addressable Detectors & devices per Loop	250		
d	Complete System Scanning time	3 sec		
e	Field Programming via Built in Key pad	Yes		
f	Display	640 Channel LCD / Touch Panel		
g	Occupancy Scheduling feature	Yes		
h	Adjustable Alarm Sensitivity Level	Yes		
i	Windows based Upload & Download programming Utility	Yes		
j	Event History	2000 events		



k	Trouble alarm History	1000 events		
	Loop Length (1.5 sq. mm twisted wire)	1200 Meters		
	Electrical Specifications			
	Primary Input Power	AC/ DC		
	Current Input			
	Details of standby batteries (for 24 hours backup)			
	a) No.			
	b) Capacity			
1	UL 9 th Edition listed / EN 54 (Latest UL / EN54 Standards to be implemented)	Yes		
2	Repeater Panel			
a	UL 864 Listed / EN 54	Yes		
b	Display	Yes		
c	Mimic all events and Notification from the Panel	Yes		
d	It shall have functional keys like Acknowledge, Signal Silence Lamp Test etc.	Yes		
3	Intelligent addressable multisensor based detector			
	a) Make			
	b) Model No.			
	c) Operating Voltage			
	d) Current Range			
	e) Detector Standby Current			
	f) Sensitivity			
	g) Sensor			
	h) Ambient temperature			
	i) Capacity / covering range			
	j) Response Threshold Value (RTV)			
4	Intelligent addressable Thermal based detector			
	a) Make			



	b) Model No.			
	c) Operating Voltage			
	d) Current Range			
	e) Detector Standby Current			
	f) Sensitivity			
	g) Sensor			
	h) Ambient temperature			
	i) Capacity / covering range			
	j) Response Threshold Value (RTV)			
5	Addressable Dual Action Manual Call Point			
	UL Listed / EN 54	required		
	Addressable	required		
	It shall use a key operated test-reset lock to reset it after and alarm / test operation	required		
6	Hooter cum Strobe Lights			
	The hooter shall have a output of 80 dB at 10 feet	required		
	They shall be connected to the main fire panel with modules. (if not loop powered)	required		
7	Fault Isolator Module			
	UL Listed / EN 54	required		
	Automatic resetting arrangement	required		
	Whether the detectors and devices offered are provided with inbuilt fault Isolator	required		
8	Addressable control modules			
	UL Listed / EN 54	required		
	Addressable	required		

Signature of tenderer _____

Firm Seal



**Reserve Bank Staff college
Estate Cell
Chennai**

**Tender for Design, Supply, Installation, Testing and Commissioning of
Intelligent Analogue Addressable Fire Alarm System for New hostel
building, Reserve Bank staff College at Teynampet, Chennai**

**Section - IX
Un-Priced Bid**

Sl. No	Description of item	Quantity
	FIRE ALARM PANEL	
1	Supply, Installation, Testing and Commissioning of Microprocessor based on one loop with expandable provision of additional 3 loops, Networkable analogue addressable Fire Alarm Control Panel (FACP) with redundant panel. The Panel shall have minimum 640-character LCD / LED display or touchscreen. Each loop shall have a capacity of minimum 250 analog addressable detectors / devices. It shall have multi access levels, flash EPROM and should be operated on 240 volts AC power supply, (UPS supply will be given by the Bank). Automatic battery charger, 24 volts sealed lead acid batteries sufficient for 24 hours normal working and then be capable of operating the system for 30 Minutes during an emergency condition. Fire Alarm Control Panel shall also be supplied with all the required gateways like Modbus BACnet, etc., and the required hardware, software, Application Program Interface (API), Software Development Key (SDK), etc., to communicate on open protocol such as Modbus / BACnet etc. for connectivity with the Command and Control Centre. Cost of FAS panel shall include all the Loop cards, Interface cards, control cards, power control cards, etc. The OEM (/Bidder) shall submit a Certificate stating that their system is approved by UL listed & FM approved/ EN54 compliant. The Panel shall comply fully with the detailed specifications set out in Part I of the tender.	01 no.
2	Supply, Installation, Testing and Commissioning of Repeater Panel complete with minimum suitable display or touchscreen to indicate the status of system and location of incident, etc., back-box and control function. It shall be UL / EN 54 & VDS approved. The LCD shall display all events / detectors, devices status of complete systems in the networked, The NRP shall be equipped with QWERTY Keypad. Mounting options include an annunciator box, and blank modules are required for mounting the Panel and comply fully with the detailed specifications set out in Part I of the tender	01 no.



	Initiating Devices	
3	Multi sensor detector below false ceiling Supply Installation testing and Commissioning (SITC) of Intelligent analog Addressable type multi sensor detector below false ceiling (Photo + Fixed Temp. + Rate of Rise Temp.) with inbuilt Isolator / isolation module as per NBC / NFPA latest guidelines along with base for use as heat or smoke or combined both, analogue addressable, microprocessor type with operating temperature from -20°C to + 55°C. Detector shall have auto learn, drift compensation with both automatic electronic addressing or dip switch addressing, termination lugs, glands etc. It shall be UL / EN approved. Works include providing mounting boxes, indicating leds complete as required for below false ceiling and work to be executed as per the engineer directions along with the detailed specifications set out in Part I of the tender	68 nos.
4	Supply Installation testing and Commissioning (SITC) of Intelligent analog addressable type multi sensor detector above false ceiling i.e. in the true ceiling (Photo + Fixed Temp. + Rate of Rise Temp.) with inbuilt Isolator / isolation module as per NBC / NFPA latest guidelines along with base for use as heat or smoke or combined both, analogue addressable, microprocessor type with operating temperature from -20°C to + 55°C. Detector shall have auto learn, drift compensation with both automatic electronic addressing or DIP switch addressing, termination lugs, glands etc. It shall be UL / EN approved. Works include providing mounting boxes, indicating leds complete as required for above false ceiling/ true ceiling etc and work to be executed as per the engineer directions along with the detailed specifications set out in Part I of the tender.	30 nos.
5	Supply, Installation, Testing and Commissioning of intelligent Analog Addressable Rate of rise cum fixed temperature detector with inbuilt Isolator / isolation module as per NBC / NFPA latest guidelines along with mounting base, LED indicators complete as required below false ceiling / true ceiling. It shall be UL/EN approved. Works include providing mounting boxes, indicating leds, with both automatic electronic addressing or DIP switch addressing etc, complete as required for above false ceiling / true ceiling etc and work to be executed as per the engineer directions along with the detailed specifications set out in Part I of the tender.	01 no.
6	Supply, Installation, Testing and Commissioning of Addressable dual action manual call station unit with lock and key with back box. It shall be UL / EN approved. Cost of all the accessories including back mounting boxes, support etc required for fixing of this device on concrete wall / wall panels, termination of cables, glands, lugs & clamps, necessary routing pipes in concealed fashion / in surface type etc have to be included in the rate quoted and work to be executed as per the engineer directions along with the detailed specifications set out in Part I of the tender.	15 nos.
	Notification Devices	



7	Supply, Installation, Testing and Commissioning of Addressable Hooter cum Strobe Lights with 110 cd complete with modules. Cost of all the accessories including back boxes, required modules at FAS panels, etc., required for fixing of hooter on wall/ concrete roof / false ceiling, required accessories for termination of cables, routing pipes, support clamps, lugs and glands etc etc., complete have to be included in the rate quoted and comply fully with the detailed specifications set out in Part I of the tender.	15 nos.
8	Supply, Installation, Testing and Commissioning of Response Indicator (RI) with dual LEDs. Cost of all the accessories required like boxes, back plate, for fixing of RI on wall/ concrete roof / false ceiling termination of cable, etc required accessories, etc., complete have to be included in the rate quoted and comply fully with the detailed specifications set out in Part I of the tender.	30 nos.
9	Addressable Relay Modules: Supply, Installation, Testing and Commissioning of Addressable Control Modules for Control Dampers, lift system, etc., Cost must include all the accessories, control / monitor / Interface cards, interoperability relays, control relays, contactors, etc., in complete operable condition and comply fully with the detailed specifications set out in Part I of the tender	2 nos.
	CABLE	
10	Supply and laying of 2x1.5sq.mm armoured RED coloured FRLS standard twisted copper conductor cable for Fire alarm Loop (A type), etc., on ceiling / walls / trays including concealed drops with all accessories hardware, (eg. Required support clamps, lugs, cable numbering plates, saddles, spacers, glands, etc.) and fixing materials including civil works making drill, holes and as directed by the Bank's engineer and as per the site requirements. Further, it shall comply fully with the detailed specifications set out in Part I of the tender.	1200 Meters
11	Same as above, but in underground manner by excavation at minimum two feet below soil, by providing 2 inch (50 mm) GI B Class pipe, connectors, L bend, couplers, etc., and other required accessories shall be included.	12 Meters
12	Removal of old fire alarm system damaged existing fire cable and testing and checking of old cables healthiness and reuse of the same old cable.	200 Meter
A	GRAND TOTAL (Rs.)	
13	Rebate for dismantling and taking away old fire alarm system (Ravel make) including old detectors, main panel, repeater panels, hooters, MCPs, etc., removal including only those damaged fire alarm cables after commissioning and stabilization of new fire alarm system.	01 job



B	Total amount for Rebate (Rs.)	
14	Comprehensive Annual Maintenance Service (CAMC) charges for the entire fire alarm system including main fire alarm panel,all kind of fire devices and cabling, spares, labour, upgradation of software,repeater panel etc. The rate shall be valid for first year after initial guarantee period of one year.	01 job

Seal & Signature of the firm _____



Annexure 'A'

List of similar works executed during the last 5 years (works completed on or after August 01, 2021)

Sr. No.	Name and address of the firm	No. of units supplied	Value of the work	Whether works completed in time or not (give date of start & and date of completion)	Completion period as per work order	Fax / phone number & contact person of the firm

(Attach TDS certificate in case of private companies)

(Attach sheet if required)

Signature & Seal of the firm

Date



Annexure 'B'

Client's Certificate regarding. Performance of the Contractor

Name & address of the Client

Details of Works executed by Shri / M / s

- 1 Name of work with brief particulars
- 2 Agreement No. and date
- 3 Agreement amount
- 4 Date of commencement of work
- 5 Stipulated date of completion
- 6 Actual date of completion
- 7 Details of compensation levied for delay (indicate amount),
if any
- 8 Gross amount of the work completed and paid
- 9 Name and address of the authority under whom works
executed
- 10 Whether the contractor employed qualified Engineer /
Overseer during the execution of work?
- 11 i) Quality of work (indicate grading) Outstanding / Very Good /
Good / Satisfactory / poor
ii) Amount of work paid on reduced rates, if any.
- 12 i) Did the contractor go for arbitration?
ii) If yes, total amount of claim
iii) Total amount awarded
- 13 Comments on the capabilities of the contractor.
a) Technical proficiency Outstanding / Very Good /
Good / Satisfactory / poor
b) Financial soundness Outstanding / Very Good /
Good / Satisfactory / poor



- | | |
|---------------------------------|---|
| c) Mobilization of adequate T&P | Outstanding / Very Good /
Good / Satisfactory / poor |
| d) Mobilization of manpower | Outstanding / Very Good /
Good / Satisfactory / poor |
| e) General behavior | Outstanding / Very Good /
Good / Satisfactory / poor |

Signature & Seal of the firm

Note : All columns should be filled in properly and countersigned by an Officer in the rank of executive engineer / Superintending Engineer or equivalent



Annexure – ‘C’

FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK (On Bankers' Letter Head)

To,
The Principal,
359, Anna Salai,
Reserve Bank staff college,
Teynampet, Chennai -18.

This is to certify that to the best of our knowledge and information of M / s..... / Shri..... a customer of our bank having marginally noted address, are / is respectable and can be treated as good for any engagement up to a limit of ₹..... (Rupees). This certificate is issued without any guarantee or responsibility on the bank or any of its officers.

1. Composition of the firm

(whether Partnership / Private Limited / Proprietorship / Public Limited.)

2. Name of the Proprietor / Partners / Directors of the firm.

3. Turnover of the firm for the last 3 years (year wise).

4. Credit facility / Overdraft facility enjoyed by the firm.

5. Dealings

6. The period from which the firm has been banking with your bank.

7. Any other remarks.

For the Bank with Name, designation & Seal

Note:

1. You may also kindly forward your opinion in the remarks, whether the above firm is considered financially sound to be entrusted with the contract for works estimated to cost Rs.15.45 Lakh.
2. Bankers' certificates should be on letter head of the Bank, sealed in cover addressed to enlistment authority.
3. In case of partnership firm, certificate to include names of all partners as recorded with the Bank.



Annexure -‘D’
Details of service set up at the place of work

S.No.	Details of service Centre	
1	Address of Service Centre	
2	Contact numbers	
3	Staff strength	
4	Whether spares parts of the fire alarm system have been stocked	

Authorised person signature & Seal of the firm



Annexure - 'E'
Schedule of Technical Deviations if any

We confirm that all technical terms and conditions and specifications of the Bank except for the deviations listed below are acceptable to us.

Sl. No.	Section No.	Clause No.	Deviation proposed
1	2	3	4

Signature & Seal of the firm

Name

Designation

Date



Annexure -‘F’ Details of Bankers

The details of our bankers in the following format are to be uploaded.

Sr. No.	Name of Bank	Branch and its complete address	Name of the contact person	Telephone, FAX number and e-mail IDs
1	2	3	4	5

Signature & Seal of the firm

Name

Designation

Date



Annexure 'G'

Format for Power of Attorney for signing of Application/proposal (On Non-Judicial Stamp Paper of appropriate value)

Know all men by these presents, We.....
(Name of the Bidder and address of their registered office) do hereby constitute, appoint and authorise Mr. / Ms.....
(Name and residential address of Power of Attorney holder) who is presently employed with us and holding the position of as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our **“Tender for Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff college at Teynampet, Chennai”** including signing and submission of all documents and providing information / responses to RBSC, Chennai representing us in all matters before RBI Chennai and generally dealing with RBSC, Chennai in all matters in connection with our proposal for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Note

Power of Attorney should be properly stamped and notarized
Power of Attorney furnished shall be irrevocable.

Signature/(s) of the Bidder

Name/(s)

Stamp/Seal of the Bidder

(NB: This guarantee will require stamp duty as applicable in the state, where it is executed and shall be signed by the official whose signature and authority shall be verified).



Annexure 'H'

Proforma for Bank Guarantee (PBG) in Lieu of Earnest Money Deposit (EMD)

(To be submitted on non-judicial stamp paper of appropriate value purchased in the name of the issuing Bank).

This deed of guarantee made this _____ day of _____ two thousand _____ between _____ (Name of Banker) having its registered office at _____ (place) and one of its local offices at _____ (hereinafter referred to as the Surety), and Reserve Bank Staff College, constituted by the Reserve Bank of India Act, 1934, having its Central Office at Central Office Building, Shahid Bhagat Singh Road, Mumbai-400 001 INDIA (hereinafter referred to as the Bank).

WHEREAS _____ (Tenderer's name hereinafter referred to as 'Tenderer') a Company registered under _____ and having its registered office at _____ is bound to deposit with the Bank by way of earnest money INR _____ (INR _____ only) in connection with its **'Tender for Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff college at Teynampet, Chennai'** and the specifications and terms and conditions enclosed therein.

WHEREAS the tenderer as per clause No. _____ Part 1 **Commercial conditions and special conditions** has agreed to furnish a Bank Guarantee valid up to _____ instead of deposit of earnest money in cash.

NOW THIS WITNESSETH:

1 That the Surety in consideration of the above Tender made by the Tenderer to the Bank hereby undertakes to guarantee payment on demand without demur to the Bank the said amount of INR _____ (INR _____ only) within one week from the date of receipt of the demand from the Bank on presentation of this deed of guarantee, which the Tenderer is bound to deposit with the Bank by way of earnest money in connection with his Tender.

2 This guarantee shall not be affected by any infirmity or irregularity on the part of the Tenderer or by the dissolution or any change in the constitution of the Bank, Tenderer or the Surety.

3 The Bank shall be eligible to make any claim under this guarantee if the Tenderer after submitting his Tender, rescinds from his offer or modifies the terms and conditions thereof in a manner not acceptable to the Bank or expresses his unwillingness to accept the order after the Bank has decided to place order with the Tenderer for the Tender for Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff college at Teynampet, Chennai. The Banks' decision in this regard shall be final and binding.

4 The Surety shall not and cannot revoke this guarantee during its currency except with previous consent of the Bank in writing.

5 Notwithstanding anything contained in the foregoing, the Surety's liability under the guarantee is restricted to INR _____ (INR _____ only).



6 This guarantee shall remain in force and effective up to _____ and shall expire and become ineffective on intimation thereof being given to the Surety by the Bank in which event this guarantee shall stand discharged.

7 The Surety will make the payment pursuant to the demand notice issued by the Bank, notwithstanding any dispute that may exist or arise between the Tenderer and the Bank or any other person.

8 Any forbearance, act or omission on the part of the Bank in enforcing any of the conditions of the said tender or showing of any indulgence by the Bank to the tenderer shall not discharge the Surety in any way and the obligations of the Surety under this guarantee shall be discharged only on the intimation thereof being given to the Surety by the Bank.

9 Notwithstanding anything contained hereinabove, unless a demand or claim under this guarantee is made on the Surety in writing on or before _____, the Surety shall be discharged from all liabilities under guarantee thereafter.

10 The Surety has the power to issue this guarantee under its Memorandum and Articles of Association and the person who is hereby executing this deed has the necessary powers to do so under the Power of Attorney granted to him by the Surety.

SIGNED AND DELIVERED For and on behalf of or and on behalf of above named Bank.
(Banker's Name and Seal)

Bank Manager
(Banker's seal)



Annexure -‘J’
Proforma of Bank Guarantee for Security Deposit

(To be submitted on Non-judicial stamp paper of appropriate value purchased in the name of the issuing bank)

No. _____ Date _____

To
The Principal,
Reserve Bank Staff college,
359, Anna salai,
Chennai- 600 018

Madam/ Dear Sir,

In consideration of your agreeing to accept the security deposit of INR _____ (INR _____ only) furnish able to you by Messrs _____ (hereinafter referred to as “the Contractor”) in terms of their contract with you for **‘Tender for Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff college at Teynampet, Chennai’** as per their Tender dated _____ and your Special Conditions of Contract and other tender documents relating thereto subject to the conditions and alterations mutually agreed upon the set forth or referred to in your Contract dated _____ in the form of guarantee from us in the manner hereinafter contained, we _____ (Name of the Bank) do hereby covenant and agree with you as follows :

1. We undertake to indemnify you and keep you indemnified from time to time to the extent of INR _____ INR(_____ only) against any loss or damage caused to or suffered by or that may be caused to or suffered by you by reason of any breach or breaches on the part of the Contractor of any of the terms and conditions contained in the said Contract and in the event of the Contractor making any default or default in carrying out any of the work under the said Contract or otherwise in the observance and performance of any of the terms and conditions relating thereto in accordance with the true intent and meaning thereof, we shall forthwith on demand pay to you such sum or sums not exceeding in total the said sum of INR _____ (INR _____ only) as may be claimed by you as your losses and/or damages, costs, charges or expenses by reason of such default on the part of the Contractor.
2. Notwithstanding anything to the contrary, your decision as to whether the Contractor has made any such default or defaults and the amount or amounts to which you are entitled by reasons thereof will be binding on us and we shall not be entitled to ask you to establish



your claim or claims under this Guarantee but will pay the same forthwith on your demand without any protest or demur.

3. This guarantee shall continue and hold good until it is released by you on the application by the Contractor after expiry of the relative guarantee period of the said Contract and after the contractor had discharged all his obligations under the said Contract and produced a certificate of due completion of the work under the said contract and submitted a “No Demand Certificate”, provided always that this guarantee shall in no event remain in force after the day of _____ without prejudice to your claim or claims arisen and demanded from or otherwise notified to us in writing before the expiry of six months from the said date which will be enforceable against us notwithstanding that the same is or are enforced after the said date.
4. Should it be necessary to extend this guarantee on account of any reason whatsoever, we undertake to extend the period of this Guarantee on your request till such time as may be required by you. Your decision in this respect shall be final and binding on us.
5. You will have the fullest liberty without effecting this guarantee from time to time to vary any of the terms and conditions of the said contract or extend the time of performance of the Contractor or to postpone for any time or from time to time any of your rights or powers against the Contractor and either to enforce or forbear to enforce any of the terms and conditions of the said Contract and we shall not be released from our liability under this guarantee by the exercise of your liberty with reference to matters aforesaid or by reason of any time being given to the Contractor or any other forbearance, act or omission on your part or any indulgence by you to the Contractor or by any variation or modification of the said contract or any other act, matter or things whatsoever, which under the law relating to sureties would but for the provisions hereof have the effect of so releasing us from our liability hereunder provided always that nothing herein contained will enlarge our liability hereunder beyond the limit of INR _____ (INR _____ only) as aforesaid.
6. This guarantee shall not in any way be affected by your taking or varying or giving up any securities from the Contractor or any other person, firm or company on its behalf or by the winding up, dissolution, insolvency or death as the case may be, of the Contractor.
7. In order to give full effect to the guarantee herein contained you shall be entitled to act as if we were your principal debtors in respect of all your claims against the Contractor hereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of surety-ship



and other rights, if any, which are in any way inconsistent with any of the provisions of this guarantee.

8. Subject to the maximum limit of our liability as aforesaid, this guarantee will cover all your claim or claims against the contractor from time to time arising out of or in relation to the said contract and in respect of which your claim in writing is lodged on us before expiry of six months from the date of expiry of this guarantee.
9. Any notice by way of demand or otherwise hereunder may be sent by special courier, telex, fax or registered post to our local address as aforesaid and if sent by post, it shall be deemed to have been given when the same has been posted.
10. This guarantee and the powers and provisions herein contained are in addition to and not by way of limitation of or substitution for any other guarantee or guarantees heretofore given to you by us (whether jointly with others or alone) and now existing un cancelled and that this guarantee is not intended to and shall not revoke or limit such guarantee or guarantees.
11. This guarantee shall not be affected by any change in the constitution of the contractor or us nor shall it be affected by any change in your constitution or by any amalgamation or absorption thereof or therewith but will ensure to the benefit of and be available to and enforceable by the absorbing or amalgamated company or concern.
12. Any forbearance, act or omission on the part of the Bank in enforcing any of the conditions of the said tender or showing of any indulgence by the Bank to the Tenderer shall not discharge the Surety in any way and the obligations of the Surety under this guarantee shall be discharged only on the intimation thereof being given to the Surety by the Bank.
13. This guarantee is irrevocable during the period of its currency and shall not be revoked without your previous consent in writing.
14. We further agree and undertake to pay you without demur the amount demanded by you in writing notwithstanding any difference or dispute or controversy that may exist or arise between you and contractor or any other person.
15. Notwithstanding anything contained herein above our liability under this guarantee is restricted to INR _____ (INR _____ only). Unless a written claim is lodged on us for payment under this guarantee within six months from the date of expiry, including extensions if any, of this guarantee all your rights under the guarantee shall be forfeited and we shall be deemed to have been released and discharged from all liabilities there under, irrespective of whether or not the original guarantee is returned to us.
16. We have power to issue this guarantee in your favour under the Memorandum and Articles



of Association of our Bank and the undersigned has full power to execute this Guarantee under the Power of Attorney granted to him by the Bank.

SIGNED AND DELIVERED

For & on behalf of

(For & on behalf of the above named Bank)

(Banker's Name & Seal)

BRANCH MANAGER

(Banker's Seal with Address)



Annexure - 'K'
ECS / NEFT MANDATE FORM
(Mandate for receiving payments through ECS / NEFT from RBSC, Chennai)

All entries should be filled in neatly and legibly in Capital letters

Details of the Vendor											
1	Name of the Vendor										
2	Address of the Vendor										
3	Email ID of the Vendor										
4	Phone Number										
5	Mobile Number	0									
6	Contact Person										

PAN and GSTIN Details			
PAN.		PAN Card Holder Name	
GSTIN No.			

Bank account particulars of the Vendor																	
1	Name of the Bank																
2	Name of the Branch																
3	Address of the Bank Branch																
4	IFS Code (11 digits)																
5	MICR Code (9 digits)																
6	Bank account type (SB-10 / CA-11 / CC - 13)																
7	Core Banking Account No.																

Please enclose the undernoted documents in support of the details mentioned above
(1) a blank cancelled CTS-cheque



- (2) Photocopy of your PAN card
- (3) Proof of GST registration

Declaration

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected for reasons of incomplete or incorrect information, then I would not hold the Reserve Bank of India responsible.

Signature of the Vendor/ Account holder

Date _____
Place _____

Vendor with Company Seal

The e-mail ID of the College for Communication: principalrbsc@rbi.org.in



Annexure 'L'

Complaint Escalation Matrix

Sl.No	Support Level	Name	Phone no.	E-mail ID
1	Level 1			
2	Level 2			
3	Level 3			
4	Level 4			

Signature & Seal of the firm



Annexure 'M'

Undertaking for maintenance confirmation by the Tenderer

To,
The Principal,
Reserve Bank staff College,
No.359, Anna Salai,
Teynampet
Chennai -600 018.

Madam / Dear Sir,

“Tender for Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai”. We hereby undertake to maintain the Fire Alarm System installed by us in your premises satisfactorily, for a period of **not less than 08 years**.

In the unlikely event of M/s _____ the original equipment manufacturer, failing to provide support in terms of spares, etc., due to technological obsolescence or for any reason, we shall continue to provide to your satisfaction, by arranging required spares, etc., ourselves, within the rate quoted by us for the Inspection service contract for the period accepted as above.

Yours faithfully,

For _____

Authorised signatory



ANNEXURE-O

Proforma of Undertaking for maintenance confirmation by the Original Equipment Manufacturer (OEM)

To,
The Principal
Reserve Bank of India
No. 359, Anna Salai
Teynampet
Chennai - 600 018

Madam / Dear sir,

Tender for Design, Supply, Installation, Testing and Commissioning of Intelligent Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff College at Teynampet, Chennai

We hereby undertake to maintain the **Intelligent Analogue Addressable Fire Alarm System** installed by us in RBSC, New hostel building, Teynampet in Chennai through M/s _____, our authorised dealer / system integrator satisfactorily, for a period of **not less than 7 years after expiry of the defect liability / warranty period of one year** from the date of commissioning and handing over the system to the Bank at the rates quoted in the tender towards all-inclusive annual maintenance contract, subject only to the price revision clause specified in the tender.

In the unlikely event of M/s _____ not remaining our authorised dealer / system integrator, we, the original equipment manufacturer, shall continue to provide support through any of our other dealer / system integrator in terms of spares / technical man power, etc., i.e., all-inclusive service to your satisfaction, by arranging required spares, etc., ourselves, within the rate quoted in the tender for the all-inclusive maintenance contract for the period accepted as above. In case of any such event, the Bank shall be immediately informed about the details of the new authorised dealer / system integrator.

Yours faithfully,

For _____

(OEM)

Authorised Signatory

For _____

(Authorised Dealer / System Integrator)

Authorised Signatory



ANNEXURE- P

Copy of work/purchase order (issued on or before August 31, 2021) of similar works and its completion certificate (of any amount) to be attached to prove the experience of five years in this field.

Sr. No.	Name of work and location	Name, Address and Contact details of the principal employer	Work order ref. No. & date	Stipulated date of completion	Actual date of completion

(Attach sheet if required)

Signature of tenderer

Date with company seal



Annexure Q

Declaration for Local Content

(To be given on Company Letter Head for tender value below ₹10 crore and by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender valuing ₹10 crore or above)

Date: _____

To Whomsoever It May Concern

Subject: Declaration of Local Content

Tender Reference No: _____

Name of Tender / Work: _____

1. Country of Origin of Goods being offered: _____

2. We hereby declare that items offered has _____ % local content which qualifies us as _____ (Class I Local / Class II Local / Non-Local) supplier.

3. Details of location at which local value addition will be made / made (Complete address to be mentioned): _____

"Local Content" means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all custom duties) as a proportion of the total value, in percent.

"False declaration will be in breach of Code of Integrity under Rule 175(1) (i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for upto two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law."

Yours Faithfully,

(Signature with Official Seal)



**Reserve Bank Staff college
Estate Cell
Chennai
PART-II**

**Tender for Design, Supply, Installation, Testing and Commissioning of Intelligent
Analogue Addressable Fire Alarm System for New hostel building, Reserve Bank staff
College at Teynampet, Chennai**

Sl. No	Description of item	Quantity	Item Rate (Rs.)	Amount (Rs.)
	FIRE ALARM PANEL		Including GST	Including GST
1	Supply, Installation, Testing and Commissioning of Microprocessor based on one loop with expandable provision of additional 3 loops, Networkable analogue addressable Fire Alarm Control Panel (FACP) with redundant panel. The Panel shall have minimum 640-character LCD / LED display or touchscreen. Each loop shall have a capacity of minimum 250 analog addressable detectors / devices. It shall have multi access levels, flash EPROM and should be operated on 240 volts AC power supply, (UPS supply will be given by the Bank). Automatic battery charger, 24 volts sealed lead acid batteries sufficient for 24 hours normal working and then be capable of operating the system for 30 Minutes during an emergency condition. Fire Alarm Control Panel shall also be supplied with all the required gateways like Modbus BACnet, etc., and the required hardware, software, Application Program Interface (API), Software Development Key (SDK), etc., to communicate on open protocol such as Modbus / BACnet etc. for connectivity with the Command and Control Centre. Cost of FAS panel shall include all the Loop cards, Interface cards, control cards, power control cards, etc.	01 no.		



	The Panel shall be listed for UL864, 9th Edition / EN 54 and comply fully with the detailed specifications set out in Part I of the tender.			
2	Supply, Installation, Testing and Commissioning of Repeater Panel complete with minimum suitable display or touchscreen to indicate the status of system and location of incident, etc., back-box and control function. It shall be UL / EN 54 & VDS approved. The LCD shall display all events / detectors, devices status of complete systems in the networked, The NRP shall be equipped with QWERTY Keypad. Mounting options include an annunciator box, and blank modules are required for mounting the Panel and comply fully with the detailed specifications set out in Part I of the tender	01 no.		
	Initiating Devices			
3	Multi sensor detector below false ceiling Supply Installation testing and Commissioning (SITC) of Intelligent analog Addressable type multi sensor detector below false ceiling (Photo + Fixed Temp. + Rate of Rise Temp.) with inbuilt Isolator / isolation module as per NBC / NFPA latest guidelines along with base for use as heat or smoke or combined both, analogue addressable, microprocessor type with operating temperature from -20°C to + 55°C. Detector shall have auto learn, drift compensation with both automatic electronic addressing or dip switch addressing, termination lugs, glands etc. It shall be UL / EN approved. Works include providing mounting boxes, indicating leds complete as required for below false ceiling and work to be executed as per the engineer directions along with the detailed specifications set out in Part I of the tender	68 nos.		
4	Supply Installation testing and Commissioning (SITC) of Intelligent analog addressable type multi sensor detector			



	above false ceiling i.e. in the true ceiling (Photo + Fixed Tempt. + Rate of Rise Temp.) with inbuilt Isolator / isolation module as per NBC / NFPA latest guidelines along with base for use as heat or smoke or combined both, analogue addressable, microprocessor type with operating temperature from -20°C to + 55 °C. Detector shall have auto learn, drift compensation with both automatic electronic addressing or DIP switch addressing, termination lugs, glands etc. It shall be UL / EN approved. Works include providing mounting boxes, indicating leds complete as required for above false ceiling/ true ceiling etc and work to be executed as per the engineer directions along with the detailed specifications set out in Part I of the tender.	30 nos.		
5	Supply, Installation, Testing and Commissioning of intelligent Analog Addressable Rate of rise cum fixed temperature detector with inbuilt Isolator / isolation module as per NBC / NFPA latest guidelines along with mounting base, LED indicators complete as required BELOW FALSE CEILING / TRUE CEILING. It shall be UL/EN approved. Works include providing mounting boxes, indicating leds, with both automatic electronic addressing or DIP switch addressing etc, complete as required for above false ceiling / true ceiling etc and work to be executed as per the engineer directions along with the detailed specifications set out in Part I of the tender.	01 no.		
6	Supply, Installation, Testing and Commissioning of Addressable Dual Action Manual Call Station Unit with lock and key with back box,. It shall be UL / EN approved. Cost of all the accessories including back mounting boxes , support etc required for fixing of this device on concrete wall / wall panels, termination of cables, glands , lugs & clamps, necessary routing pipes in concealed	15 nos.		



	fashion / in surface type etc have to be included in the rate quoted and work to be executed as per the engineer directions along with the detailed specifications set out in Part I of the tender.			
	Notification Devices			
7	Supply, Installation, Testing and Commissioning of Addressable Hooter cum Strobe Lights with 110 cd complete with modules. Cost of all the accessories including back boxes, required modules at FAS panels, etc., required for fixing of hooter on wall/ concrete roof / false ceiling, required accessories for termination of cables, routing pipes, support clamps, lugs and glands etc etc., complete have to be included in the rate quoted and comply fully with the detailed specifications set out in Part I of the tender.	15 nos.		
8	Supply, Installation, Testing and Commissioning of Response Indicator (RI) with dual LEDs. Cost of all the accessories required like boxes, back plate, for fixing of RI on wall/ concrete roof / false ceiling termination of cable, etc required accessories, etc., complete have to be included in the rate quoted and comply fully with the detailed specifications set out in Part I of the tender.	30 nos.		
9	Addressable control and relay Modules: Supply, Installation, Testing and Commissioning of Addressable Control / relay Modules for Control Dampers, lift system, etc., Cost must include all the accessories, control / monitor / Interface cards, interoperability relays, control relays, contactors, etc., in complete operable condition and comply fully with the detailed specifications set out in Part I of the tender	3 nos.		
	CABLE			
10	Supply and laying of 2x1.5 sq.mm armoured RED coloured FRLS standard	1200 Meters		



	twisted copper conductor cable for Fire alarm Loop (A type), etc., on ceiling / walls / trays including concealed drops with all accessories hardware, (eg. Required support clamps, lugs, cable numbering plates, saddles, spacers, glands, etc.) and fixing materials including civil works making drill, holes and as directed by the Bank's engineer and as per the site requirements. Further, it shall comply fully with the detailed specifications set out in Part I of the tender.			
11	Same as above, but in underground manner by excavation at minimum two feet below soil, by providing 2 inch (50 mm) GI B Class pipe, connectors, L bend, couplers, etc., and other required accessories shall be included.	12 Meters		
12	Removal of old fire alarm system damaged existing fire cable and testing and checking of old cables healthiness and reuse of the same old cable.	200 Meter		
A	GRAND TOTAL (Rs.)			
13	Rebate for dismantling and taking away old fire alarm system (Ravel make) including old detectors, main panel, hooters, MCPs, etc., removal including only those damaged fire alarm cables after commissioning and stabilization of new fire alarm system.	01 job		
B	Total amount for Rebate (Rs.)			
14	Comprehensive Annual Maintenance Service (CAMC) charges for the entire fire alarm system including main fire alarm panel, all kind of fire devices and cabling, spares, labour, upgradation of software, repeater panel etc. The rate shall be valid for first year after initial guarantee period of one year.	01 job		