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# INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI - 110016

# NOTICE INVITING E-TENDER

IITD/WORKS(SP-1991)/2018

Executive Engineer [Electrical], Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 100016 [Phone No. 011-26591746] on behalf of Board of Governors invites online Item Rate Tender from Contractors of repute as per details given below:

1	Name of Work	:	Augmentation of Fire Detection System in M.S. Building at IIT Delhi
2	NIT No.	:	9434/61/IITD/EW/2018-19
3	Estimated cost	:	Rs.2,41,53,162.00
4	Earnest Money	:	Rs.4,83,063.00
5	Period of completion	:	09 months
6	Last date & time of bid submission	:	Upto 3 PM of 01-01-2019
7	Performance Bank Guarantee	:	5% of the tendered amount

The bid forms and other details may be downloaded from Central Public Procurement Portal http://eprocure.gov.in/eprocure/app. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website http://eprocure.gov.in/eprocure/app . The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission '.

Bidders can access Quotation / tender documents on the website (For searching in the NIC site, kindly go to Quotation Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi Quotations). Select the appropriate Quotation / tender and fill them with all relevant information and submit the completed Quotation / tender document online on the website <u>http://eprocure.gov.in/eprocure/app</u> as per the schedule given in the next page.

No manual bids will be accepted. All bids (both Technical and Financial should be submitted in the Eprocurement portal).

> **Executive Engineer [E],** For & on Behalf of BOG, IIT Delhi

Ch. Head: PLN 05 Work code- W03230

C....Nil I..... Nil

0..... Nil



# Copy to: -

- 1. Assistant Executive Engineer [E]
- 2. D.A. (Works Accounts) for opening of tenders in the office of A.R. [SPS]
- 3. A.E.E. (E) Plg.
- 4. J.R. (A/Cs)
- 5. A.R. [SPS]
- 6. Notice Boards.
- 7. Office Copy
- 8. Web site Administrator, IITD

C.....Nil I.....Nil O.....Nil



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# <u>SCHEDULE</u>

1	Name of Organisation	:	Indian Institute of Technology Delhi
-	Tender / Quotation Type [open / limited / EOI /	•	
2	auction / single]	:	Open
	Tender / Quotation Category [services / goods /		
3	works]	:	Goods & Works
4	Type / Form of Contract [work / supply / auction / service / buy / empanelment / sell]	:	Work & Supply; IITD-8
5	Product Category [civil works / electrical works / fleet management / computer systems]	:	Electrical Works
6	Is Multi Currency Allowed?	:	No
7	Date of issue / publishing /start	:	18/12/2018 at 16:00 Hrs
8	Document download start date	:	18/12/2018 at 16:00 Hrs
9	Document download end date	:	01-01-2019 at 15:00 Hrs
8	Last date & time of uploading of bids	:	01-01-2019 at 15:00 Hrs
9	Date & time of opening of Technical Bids	:	02-01-2019 at 3:00 PM
10	Tender fee	:	Free of cost
11	EMD	:	Rs.4,83,063.00 [For EMD] (To be paid through RTGS/NEFT. IIT Delhi Bank details are as under: Name of the Bank A/C : IITD Revenue Account SBI A/C No. : 10773572622 Name of the Bank : State Bank of India, IIT Delhi, Hauz Khas, New Delhi- 110016 IFSC Code : SBIN0001077 MICR Code : 110002156 Swift No. : SBININBB547 (This is mandatory that UTR Number is provided in the on- line quotation/bid. (Kindly refer to the UTR Column of the Declaration Sheet at Annexure-II)
12	EMD Exemption	:	May be granted to NSIC / MSME registered firms who are registered for this particular type of work i.e. <u>Supply,</u> <u>Installation, Testing and Commissioning of AFD</u> <u>System</u> . However, document must be enclosed with Technical bid, else, the bid shall be treated as invalid.
13	No. of covers [1/2/3/4]	:	02
14	Address for communication	:	Executive Engineer (Electrical), Works Organisation, Hauz Khas, IIT Delhi, New Delhi - 110016
15	Contact No.	:	011- 2659 1742
16	E-mail address	•	a26984@admin.iitd.ac.in; a26335@admin.iitd.ac.in;
10		•	a25891@admin.iitd.ac.in



# INSTRUCTIONS FOR ONLINE BID SUBMISSION

As per the directives of Department of Expenditure, this Quotation / tender document has been published on the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at:

http://eprocure.gov.in/eprocure/app

# REGISTRATION

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their userID / password and the password of the DSC / e-Token.

# SEARCHING FOR QUOTATION /TENDER DOCUMENTS

- There are various search options built in the CPP Portal, to facilitate bidders to search active Quotations / Tender by several parameters. These parameters could include Quotation ID, organization name, location, date, value, etc. There is also an option of advanced search for Quotations, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a Quotation published on the CPP Portal.
- 2) Once the bidders have selected the Quotations they are interested in, they may download the required documents / Quotation schedules. These Quotations can be moved to the respective 'My Quotations' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the Quotation document.
- 3) The bidder should make a note of the unique Quotation ID assigned to each Quotation / Tender, in case they want to obtain any clarification / help from the Helpdesk.

# PREPARATION OF BIDS

1) Bidder should take into account any corrigendum published on the Quotation document before submitting their bids.

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- 2) Please go through the Quotation / Tender advertisement and the Quotation / Tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the Quotation document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

# SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the Quotation document.
- 3) Bidder has to select the payment option as "offline" to pay the Quotation fee / EMD as applicable and enter details of the instrument.
- 4) A standard BoQ format has been provided with the Quotation document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

OR

In some cases Financial Bids can be submitted in PDF format as well (in lieu of BOQ).

- 5) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 7) The uploaded Quotation documents become readable only after the Quotation opening by the authorized bid openers.
- 8) Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

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# ASSISTANCE TO BIDDERS

- 1) Any queries relating to the Quotation document and the terms and conditions contained therein should be addressed to the Quotation Inviting Authority for a Quotation or the relevant contact person indicated in the Quotation.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315.

# **GENERAL INSTRUCTIONS TO THE BIDDERS**

- 1) The Quotations will be received online through portal http://eprocure.gov.in/eprocure/app . In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
- 2) Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/etoken in the company's name is a prerequisite for registration and participating in the bid submission activities through https://eprocure.gov.in/eprocure/app . Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://eprocure.gov.in/eprocure/app under the link "Information about DSC".

Bidders are advised to follow the instructions provided in the 'Instructions to the Bidder for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app

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# INFORMATION AND INSTRUCTIONS TO BIDDERS FOR E-TENDERING

Executive Engineer (E), Indian Institute of Technology, Hauz Khas, New Delhi-16 (Phone No. 011-26591746) on behalf of Board of Governors invites online **Item Rate Tender** from **Contractors of repute** as per details given below:

SI. No.	N.I.T. No.	Name of work & Location	Estimated cost put to bid	Earnest Money	Period of completion	Last date & time of submission of bid (online mode)	Time & date of opening of Technical Bid	Time & date of opening of Financial Bid
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
1	9434/61/IITD/EW/2018-19	Augmentation of Fire Detection System in M.S. Building at IIT Delhi	Rs.2,41,53,162.00	Rs.4,83,063.00	09 months	Upto 3 PM of 01-01-2019	02-01-2019 at 3:00 PM	To be decided later

- 1. The successful bidders shall be required to submit a performance guarantee of 5% of the tendered amount in the form of Bank Guarantee or F.D.R. from a Nationalized / Scheduled Bank within fifteen days of issue of letter of intent before award of work. In case of failure by the Contractor to submit the performance guarantee within the specified period, full earnest money will be forfeited and the tender shall be treated as null and void. The performance guarantee shall be initially valid up to the stipulated date of completion plus Sixty days beyond that.
- 2. Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.
  - i] Firms / Contractors should have satisfactorily completed one similar work of value not less than Rs.1,93,23,000.00 or two similar works each of value not less than Rs.1,44,92,000.00 or three

C.....Nil I.....Nil O.....Nil



similar works each of value not less than **Rs.96,61,000.00** during last 7 years ending previous day of last date of submission of bids.

- ii) Earnest Money of Rs.4,83,063.00 to be deposited on-line as indicated in Schedule
- 3. Similar work means Supplying, Installation, Testing & Commissioning of Automatic Addressable Fire Detection System in Buildings
- 4. Bidder should have had average annual financial turnover of not less than Rs.2.4 Crore during last three years ending 31 March 2017. [scanned copy of certificate from CA to be uploaded]
- 5. The intending bidder must read the terms and conditions [both commercial & Additional] & IITD 6 carefully which will be the part of the Contract. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- 6. Information and Instructions for bidders posted on website shall form part of bid document.
- 7. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website e-procure.gov.in.
- 8. But the bid can only be submitted after depositing requisite EMD as specified in the schedule.
- 9. Certificate of work experience and other documents as specified in the Press Notice / web notice shall be scanned and up-loaded to the e-Tendering website within the period of bid submission. However, certified / original copy of all the scanned and up-loaded documents as specified in press notice web / notice shall have to be submitted by the lowest bidder only within a week physically in the office of e-tendering authority, if so desired.
- **10.** Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited requisite EMD and other documents scanned and uploaded are found in order.
- **11.** Completion certificates are required to be got issued by an officer not below the rank of Executive Engineer or equivalent of similar works completed by the Firm. The work experience certificates submitted by the bidders shall clearly indicate that:
  - a. The similar work executed shall be as '3' above
  - b. The completed cost of the work
  - c. Actual date of completion of the work
- **12.** Attested copy of registration certificates to be submitted. Registration of firms/ Contractors must be valid on the day of submission of Tenders or extended date of submission of Tenders whichever is later.
- 13. Work means only work with some Central Government Department / State Government Department/ Central Autonomous Body/ State Autonomous Body/ Central Public Sector Undertaking/ Reputed Corporate Sector (in India) / State Public Sector Undertaking/City Development Authority/ Municipal Corporation of City formed under any Act by Central/ State Government and published in Central/State Gazette.
- **14.** The value of executed work shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of submission of financial bid.
- 15. IITD is committed to follow the principle of transparency, equity and competitiveness in public procurement. Before submission of bid, each bidder should sign integrity pact at respective places and submit the bid. If duly signed integrity pact is not submitted by bidder, such bid shall not be considered.

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- **16.** Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
- 17. When bids are invited in two / three stages systems and if it is desired to submit revised financial bid it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
- **18.** The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
- 19. The bid submitted shall become invalid if:
  - a. The bidder is found ineligible.
  - b. The bidder does not upload all the documents (including GSTIN registration) as stipulated in the bid document including the undertaking / declaration.
  - c. EMD not deposited as specified
  - d. Not registered with EPFO & ESIC

# List of Documents to be scanned and uploaded within the period of bid submission:

- 1. Annexure 1 duly filled in and got signed
- 2. Annexure 2 [Technical Particulars] & Annexure 3 neatly typed
- 3. Turnover Certificate issued by CA
- 4. Attested certificate of work experience as desired
- 5. Certificate of Registration for GSTIN
- 6. Affidavit as per Notice Inviting Tender Condition [IITD-6] 1.2.2 [To be submitted on stamp paper]
- 7. Acceptance to execute INTEGRITY PACT [see integrity pact]
- 8. IITD 7 / 8 duly signed
- 9. EPFO & ESIC Registration proof with upto date Challan
- 10. NSIC / MSME Certificate, if bidder claims for exemption from deposition of EMD

Product Brochure & any other document as specified in the NIT

Executive Engineer [Electrical] For & on Behalf of BOG, IIT Delhi

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<u> IITD – 6</u>

# INDIAN INSTITUTE OF TECHNOLOGY DELHI NOTICE INVITING E-TENDER

- 1.0 Item rate tenders are invited on behalf of The Board of Governors, IIT Delhi, Hauz Khas, New Delhi 110016 from Contractors of repute as per details given below for the work of Augmentation of Fire Detection System in M.S. Building at IIT Delhi
  - 1.1 The work is estimated to cost **Rs.2,41,53,162.00**. This estimate, however, is given merely as a rough guide
    - 1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids.

For composite bid, besides indicating the combined estimated cost put to tender, should clearly indicate the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.

1.2 Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:-

# Criteria of eligibility for submission of bid documents.

## 1.2.1 Criteria of eligibility for CPWD as well as non-CPWD contractors except OEM.

Three similar works each of value not less than **Rs.96,61,000.00** or two similar work each of value not less than **Rs.1,44,92,000.00** or one similar work of value not less than **Rs.1,93,23,000.00** in last 7 years ending previous day of last date of submission of bids.

# 1.2.2 To become eligible for issue of bid, the bidders shall have to furnish an affidavit as under :-

"I / We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I / We shall be debarred for bidding in IIT Delhi in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee (Scanned copy to be uploaded at the time of submission of bid)"

# 2. Agreement shall be drawn with the successful bidders on prescribed Form No. IITD 7/8 which is available as IIT Delhi Publication. Bidders shall quote their rates as per various terms and conditions of the said form which will form part of the agreement.

- 3. The time allowed for carrying out the work is tentative and initially for 09 months from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- 4. Few sites for the work is available and some sites will be made available.

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- 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site **e**-**procure.gov.in**.
- 6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
- 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
- 8. If it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid.
- 9. Earnest Money as specified to be paid through RTGS / NEFT.

IT Deini Bank details are	as under.
Name of the Bank A/C	: IITD Revenue Account
SBI A/C No.	: 10773572622
Name of the Bank	: State Bank of India, IIT Delhi,
	Hauz Khas, New Delhi-110016
IFSC Code	: SBIN0001077
MICR Code	: 110002156
Swift No.	: SBININBB547

(This is mandatory that UTR Number is provided in the on-line quotation/bid. Kindly refer to the UTR Column of the Declaration Sheet at Annexure-II)

Interested contractors who wish to participate in the bid has also to make following payments within the period of bid submission:

- (i) Copy of Enlistment Certificate and certificate of work experience and other documents as specified in the press notice shall be scanned and uploaded to the e-tendering website within the period of bid submission.
- **10.** The bid submitted shall become invalid, if:
  - a) The bidder is found ineligible.
  - b) The bidder does not upload all the documents (including GSTIN Registration, All annexures, etc.) as stipulated in the bid document.
  - c) EMD not deposited as specified
  - d) Not registered with EPFO & ESIC
- 11. The contractor whose bid is accepted will be required to furnish performance guarantee of 5% (Five Percent) of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of Deposit at Call receipt of any scheduled bank / Banker' cheque of any scheduled bank/ Demand Draft of any scheduled bank/Pay order of any Scheduled Bank (in case guarantee amount is less than Rs.1,00,000/-) or Government Securities or Fixed Deposit Receipts or irrevocable Bank Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
- 12. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity

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access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

- 13. The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
- 14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- **15.** The competent authority on behalf of the Board of Governors reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 16. The contractor shall not be permitted to bid for works in the IITD responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted officer in the IIT Delhi. Any breach of this condition by the contractor would render him liable to be debarred from bidding process in future in IIT Delhi.
- 17. No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract liable to be cancelled, if, either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- **18.** The bid for the works shall remain open for acceptance for a period of **ninety days from the date of opening of financial bids**, if any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the IIT Delhi shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the rebidding process of the work.
- **19.** This notice inviting bid shall form a part of the contract document. The successful bidder / contractor, on acceptance of his bid by the Accepting Authority shall **within fifteen days** from the stipulated date of start of the work, sign the contract consisting of:
  - a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
  - b) Standard IITD Form –7/8 or other Standard IITD Form as applicable.
- 20. In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as to be submitted physically in IIT Delhi, if so desired by the accepting authority, then the bid submitted shall become invalid and the IIT Delhi shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the bidding process of the work.

C.....Nil I.....Nil O.....Nil



# **INTEGRITY PACT**

То

·····,

# Sub: NIT No. 9434/61/IITD/EW/2018-19 for the work of "Augmentation of Fire Detection System in M.S. Building at IIT Delhi"

Dear Sir,

It is here by declared that IITD is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the Integrity Agreement, which is an integral part of the tender/bid documents, failing which the tender/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the IITD.

Yours faithfully,

**Executive Engineer** 

C.....Nil I.....Nil O.....Nil



# [TO BE SUBMITTED DULY SIGNED BY THE BIDDER ALONGWITH BID DOCUMENTS]

То

Executive Engineer (Elect.), IIT Delhi, Hauz Khas, New Delhi – 110016

Subject: Submission of Bid for the work of "Augmentation of Fire Detection System in M.S. Building at IIT Delhi"

Dear Sir,

I / We acknowledge that IITD. is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I / We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I / We will sign the enclosed integrity Agreement, which is an integral part of tender / bid documents, failing which I / We will stand disqualified from the tendering process. I / We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I / We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by IITD. I / We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I / We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, IITD shall have unqualified, absolute and unfettered right to disqualify the tenderer /bidder and reject the tender/bid is accordance with terms and conditions of the tender/bid.

Yours faithfully,

(Duly authorized signatory of the Bidder)

C.....Nil I.....Nil O.....Nil



[To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of IITD]

# INTEGRITY AGREEMENT

This	Integrity	Agreement	is	made	at	 on	this	 day	of
20									

## BETWEEN

The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 16 represe	nted through Execu	itive Engineer	r <b>(Elect.)</b> ,	IIT
Delhi	(Herei	inafter referre	ed as	the

#### 'Principal/Owner',

(Address of Division)

'**Principal/Owner**', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND (Name and Address of the Individual/firm/Company) through (Hereinafter referred

(Details of duly authorized signatory)

to as the "Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

## **Preamble**

WHEREAS the Principal / Owner has floated the Tender (NIT No. **9434/61/IITD/EW/2018-19**) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for "<u>Augmentation of Fire</u> <u>Detection System in M.S. Building at IIT Delhi</u>" (Name of work) hereinafter referred to as the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

## Article 1: Commitment of the Principal / Owner

1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:

No employee of the Principal / Owner, personally or through any of his / her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

(a) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through

C.....Nil I.....Nil O.....Nil



which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

- (b) The Principal/Owner shall Endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PoC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.
- 3) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PoC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

# Article 2: Commitment of the Bidder(s) / Contractor(s)

- It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or coercion or collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
  - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
  - c) The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/PoC Act. Further the Bidder(s) / Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal / Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - d) The Bidder(s) / Contractor(s) of foreign origin shall disclose the names and addresses of agents / representatives in India, if any. Similarly Bidder(s) / Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

C.....Nil I.....Nil O.....Nil

- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practices means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

## Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal /Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- 2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal / Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

## Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.

C.....Nil I.....Nil O.....Nil



 If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

# Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
  - 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
  - 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

# Article 6: Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 6 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority of IITD.

# Article 7: Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head Quarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by Board Resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

# Article 8: LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first

C.....Nil I.....Nil O.....Nil



Page 20 of 55

above mentioned in the presence of following witnesses:

(For and on behalf of Principal / Owner)

(Farried and half of Didden ( Ocartan day)

(For and on behalf of Bidder / Contractor)

WITNESSES:

1. .....

(signature, name and address)

2. .....(signature, name and address)

Place:

Dated :

C.....Nil I.....Nil O.....Nil



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IITD - 7/8

# INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI - 110016

# Percentage Rate Tender / Item Rate Tender & Contract for Works

Tender for the work of "Augmentation of Fire Detection System in M.S. Building at IIT Delhi"

(A) (I) To be submitted online by Upto 3 PM of 01-01-2019

(II) To be opened on 02-01-2019 at 3:00 PM online

#### e-TENDER

I / We have read and examined the Notice Inviting Tender, schedule, A, B, C, D, E & F, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, Clauses of Contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I / We hereby tender for the execution of the work specified for the Board of Governors, IIT Delhi within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the due date of its opening / ninety days from the date of opening of financial bid in case tenders are invited on 2/3 envelop system (**strike out as the case may be**) and not to make any modification in its terms and conditions.

A sum of **Rs.4,83,063.00** is hereby deposited in IIT Delhi Revenue Account No. 10773572622 as earnest money. If I / We, fail to furnish the prescribed performance guarantee within prescribed period I / We agree that the said The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 16 or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I / We fail to commence the work as specified, I / We agree that The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 16 or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. Further, I / We agree that in case of forfeiture of Earnest Money & Performance Guarantee as aforesaid I / We shall be debarred for participation in the re-tendering process of the work.

I / We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I / We shall be debarred for tendering in IIT Delhi in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I / We hereby declare that I / We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I / We am/are authorized to communicate the same or use the information in any manner

C.....Nil I.....Nil O.....Nil



prejudicial to the safety of the State.

Dated:

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:

# ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 110016 for a sum of (Rupees.....).

The letters referred to below shall form part of this contract agreement:-

- (a)
- (b)

(c)

For & on behalf of Board of Governors, IIT Delhi

Signature .....

Designation .....

Dated:

C.....Nil I.....Nil O.....Nil



# **PROFORMA OF SCHEDULES**

[Operative Schedules to be supplied separately to each intending tenderer]

# SCHEDULE 'A'

Schedule of quantities (enclosed)

## SCHEDULE 'B'

Schedule of materials to be issued to the contractor

S.No.	Description of i	tem Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
	Nil			+

# SCHEDULE 'C'

Tools and plants to be hired to the contractor

S.No.	Description	Hire charges per day	Place of Issue
•	Nił		

## SCHEDULE 'D'

Extra schedule for specific requirements/document for the work, if any.



# SCHEDULE 'E'



# Reference to General Conditions of contract [GCC]

1	Name of work	:	Augmentation of Fire Detection System in M.S. Building at IIT Delhi
2	Estimated cost of work	:	Rs.2,41,53,162.00
3	Earnest Money	:	Rs.4,83,063.00
4	Performance Guarantee	:	5 percent of tendered value
5	Security Deposit	:	5 percent of tendered value

# SCHEDULE 'F'

# **GENERAL RULES & DIRECTIONS**

: Officer inviting tender

	um percentage for quantity of items of work to be executed beyond ates are to be determined in accordance with Clauses12.2&12.3	:	See below
Definit	ions:		
2[v]	Engineer – in - charge	:	Executive Engineer [Elect]
2[vi]	Accepting Authority		Institute Engineer
2[x]	Percentage on cost of materials and labour to	:	15 percent
	Cover all overheads and profits		
2[xi]	Standard schedule of rates		DSR 2018 & Market Rate
2[xii]	Department	:	E & W, IIT Delhi
9[ii]	Standard IITD Contract Form		General Conditions of Contract
			2010,IITD Form 7/8-2010 modified &
			Corrected up to date of submission of
			tender

[i]	Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance :		Fifteen days
[ii]	Maximum allowable extension with late fees @ 0.1% per day of performance guarantee amount beyond the period provided in (i) above	:	1 to 15 days
Clau	se 2:	- 1	
Ciau	56 2.		
	prity for fixing compensation under clause 2	:	Institute Engineer
Auth		:	Institute Engineer
Auth Clau	prity for fixing compensation under clause 2 :		Institute Engineer
Auth Clau Whe	brity for fixing compensation under clause 2 : se 2 A:		•

# Milestone(s)as per table given below:-



SI. No.	Description of Milestone (Financial)		Amount to be with-held in case of non-achievement of mile stone
	TO BE FURNISHED BY B	IDDER [refer Annexu	ire]

Time allowed for execution of work	:	09 months
Authority to decide:		
Extension of time	:	Executive Engineer [Engineer-in-charge]
Rescheduling of mile stones	:	Institute Engineer
Clause Applicable 6 or 6A:	:	Clause 6 A
Clause 7:	•	
Gross work to be done together with net payment / adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment Clause 10 A:	:	Not Applicable
List of testing equipment to be provided by the contractor at site lab	:	As desired by the Engineer-in-charge relating to the work
Clause 10B(ii):		
Whether Clause 10 B (ii) shall be applicable	:	No
Clause 10C:		
Component of labour expressed as percent of value of work	:	15 percent

# Clause 10CA:

S.N.	Material covered under this clause	Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed	
1			
2		Nil	
3			
4			

\* Base price of all the materials covered under clause 10 CA is to be mentioned at the time of approval of NIT.

Clause 10CC

Clause 10 CC to be applicable in contracts with stipulated period	:	18 months



of completion exceeding the period shown in next column		
Schedule of component of other Materials, Labour, POL etc. for price escalation		
Component of civil (except materials covered under clause 10CA)/ Electrical construction Materials expressed as percent of total value of work		X <sub>m</sub> : 75 percent
Component of Labour expressed as percent of total value of work	:	Y : 25 percent
Component of P.O.L. expressed as percent of total value of work	:	Not Applicable

# Clause 11

Specifications to be followed for execution of work	:	The work shall be carried out as per CPWD
		General Specifications for Electrical works Part
		VI 2018 as amended upto date alongwith some
		changes, CPWD general Specifications for
		Electrical Works Part – I, II as amended upto
		date, relevant IE Rules and as per directions of
		Engineer-in-Charge.

# Clause 12

Type of work	:	Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration
Clause 12.2. & 12.3		
Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for	:	30 percent
building work		
Clause 12.5		
Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for	:	100 percent
foundation work		

# Clause 16

Competent Authority for deciding reduced rates		Executive Engineer [E]
Competent Autionty for deciding reduced rates	•	

# Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site:

	2	3
4	5	6
	5 <b>NII</b>	
	8	9
1		

# Clause 36 (i)



# Requirement of Technical Representative(s) and recovery Rate

S. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical Representative)	Minimum Experience (Years)	Number	made from event of not	ch recovery shall be the contractor in the fulfilling provision of lause 36(i)
						Figures	Words
1	Graduate Engineer	Electrical	P.T.R.	2	1	15000/-	Fifteen Thousand
2	Graduate or Diploma Engineer	Electrical or Electronics		2 for Graduate & 5 for Diploma	1	15000/-	Fifteen Thousand

Assistant Engineers retired from Government services that are holding diploma will be treated at par with Graduate Engineers

C.....Nil I.....Nil O.....Nil



# COMMERCIAL AND ADDITIONAL CONDITIONS

# 1.0 General

- 1.1 This specification covers manufacturing, testing as may be necessary before dispatch, delivery at site, all preparatory work assembly and installation, commissioning putting into operation of AFAS including intelligent addressable fire alarm system & final testing & commissioning.
- 1.2 Location: The equipments will be installed at MS Building at IIT Delhi

The work shall be executed as per CPWD General Specifications for Electrical Works Part-I (Int.) 2013, Part-II (Ext.) 1994, Part-IV (Sub St.) 2013, Part-VI (FAS)-2018, as amended upto date, relevant I.E. Rules, BIS/IEC and as per directions of Engineer-in- Charge. These additional specifications/conditions are to be read in conjunction with above and in case of variations; specifications given in these additional conditions shall apply. However, nothing extra shall be paid on account of these additional specification and conditions, as the same are to be read along with schedule of quantities for the work.

- 1.3 The tenderer should in his own interest visit the site and get familiarize with the site conditions before tendering.
- 1.4 No T&P shall be issued by the Department and nothing extra shall be paid on account of this.

## 2.0 Commercial Conditions:

- 2.1 Type of contract: The work to be awarded by this tender shall be treated as indivisible works contract.
- **2.2** Submission and opening of Tenders:

The tender is in two parts:

- (a) Part-I -Technical cum Un-priced commercial Bid
- (b) Part-II-Price Bid
- 2.2.1 The tender shall be submitted online, duly completed as per NIT conditions within period of bid submission:
- 2.2.2 The tenderers are advised not to deviate from the technical specifications / item , commercial terms and conditions of NIT like terms of payment, guarantee, arbitration clause, escalation etc.
- 2.2.3 Technical cum un-priced commercial bid only shall be opened on the due date and time in the presence of tenderers or their authorized representative who wish to remain present.
- 2.2.4 Scrutiny/evaluation of the technical-cum-commercial bid shall be done by the department. In case, it is found that the technical-cum-commercial bid of a tenderer is not in line with NIT specifications/requirements and/or contains too many deviations, the department reserves the right to reject the technical bid of such firms(s) without making any reference to the tenderer(s).

C.....Nil I.....Nil O.....Nil



- 2.2.5 Necessary clarifications required by the department shall have to be furnished by the tenderer within the time given by the department for the same. The tenderer will have to depute his representative to discuss with the officer(s) of the department as and when so desired. In case, in the opinion of the department a tenderer is taking undue long time in furnishing the desired clarifications, his bid will be rejected without making any reference.
- 2.2.6 After obtaining clarification from all the tenders, the department will intimate the tenders whose technical cum commercial bids are acceptable.
- 2.2.7 The price bids of only those tenderers shall be opened whose technical bids are found to be technically acceptable. The time and date of opening of price bid shall be fixed after the technical cum unpriced commercial bid is accepted and intimated to them by post/Fax/e-mail.
- 2.2.8 The department reserves the right to reject any or all the price bids and call for fresh prices/tenders as the case may be without assigning any reason.

# 3.0 Terms of Payments

The following percentage of contact rates for the various items included in the contact shall be payable against the stage of work shown herein.

- **3.1** 80% after initial inspection and delivery at site in good condition on pro-rata basis.
- **3.2** 10% after completion of installation in all respects.
- **3.3** Balance 10% will be paid after testing, commissioning and handing over to the department for beneficial use.

## 3.4 Security Deposit

Security Deposit shall be deducted from each running bill and final bill to the extent of 5% of the gross amount payable. The security deposit shall be released on the expiry of guarantee period stipulated in the contract. This shall be adjusted with the Earnest Money deposited.

## 3.5 **Performance Guarantee**

The successful tenderer shall submit an irrevocable performance guarantee of 5% of the tendered amount in addition to other deposit mentioned elsewhere in the contract for his proper performance of the contract agreement within 15 days of issue of letter of acceptance of tender. This guarantee shall be in the form of Demand Draft/Pay order of irrevocable bank guarantee bond of any schedule bank or the State Bank of India in the specified perform a of Government Security, fixed deposit receipt pledged in favour of Executive Engineer or as specified in the letter of acceptance of tender. The performance guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond. This bank guarantee shall be kept valid till the recording of completion certificate for the work by the competent authority.

**3.6** Income tax, GST, labour cess & other statutory deduction etc. shall be made at source as per the prevalent laws. The deduction of Security Deposit, Income Tax, etc., shall be done after calculation for the above due payment as per clauses 3.1 to 3.3 and net payment shall reduce accordingly.

## 4.0 Rates

C.....Nil I.....Nil



- **4.1** The rates quoted by the tenderer, shall be firm and inclusive of all taxes (including works GST & labour cess), duties, levies, etc. and all charges for packing forwarding, insurance, freight and delivery, installation, testing and commissioning etc. at site including temporary construction of storage, risks over head charges, general liabilities / obligations and clearance from CFO. However, the fee if any, for the CDO inspections shall be borne by the Department.
- **4.2** The contractor has to carry out maintenance as per manufacturer's standards for a period of 12 months from the date of handing over. Nothing extra shall be paid on this account.

# 5.0 Completeness of tender

All sundry equipments, fitting, unit assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections and all other items which are useful and necessary for efficient assembly and installation of equipment and components of the work shall be deemed to have been included in the tender irrespective of the fact whether such items are specially mentioned in the tender documents or not.

# 6.0 Storage and Custody of Material

The agency has to make his own arrangement for storage. No separate storage accommodation shall be provided by the department Watch and ward of the storage and their safe custody shall be responsibility till the final taking over of the installation by the department.

# 7.0 Care of the Building

Care shall be taken by the contractor while handling and installing the various equipment and components of the work to avoid damage to the building. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste material arising out of the installation from the site of work.

# 8.0 Completeness Period

The completion period indicated in the tender documents is for the entire work of planning, designing, approval of drawings etc, arrangement of materials & equipments, delivery at site including transportation, installation, testing, commissioning and handing over of the entire system to the satisfaction of the Engineer-in-charge.

# 9.0 Guarantee

- **9.1** All equipments shall be guaranteed for a period of 12 months from the date of taking over the installation by the department against unsatisfactory performance and/ or breakdown due to defective design, workmanship or material. The equipment or component, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost to the satisfaction of the Engineer-in-Charge. In case it is felt by the department that undue delay is being caused by the contactor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of Engineer-in-Charge in this regard shall be final & binding on the contractor.
- **9.2** The tenderer shall guarantee among other things, the following:
- (a) Quality, strength and performance of the material used as per manufacturer's standards.
- (b) Safe mechanical and electrical stress on all part under all specified conditions of operation.

C.....Nil I.....Nil O.....Nil



(c) Satisfactory operation during the maintenance period.

# 10.0 Water supply / Power Supply

Water & power supply shall be made available by the department at one point in campus free of cost, if required. Further, the arrangement for tapping power I water supply from this point shall be made by the contractor.

## 11.0 Acceptable makes of various equipments

The acceptable makes of various equipments I components I accessories have been indicated in "Acceptable Makes" indicated in the list attached. The tenderer shall work out the cost of the offer on this basis. Alternate makes are not acceptable.

# 12.0 Data Manual and Drawing to be furnished by the tenderer:

- **12.1** With tender : The tenderer shall furnish along with the tender, detailed technical literature, pamphlets and performance date for appraisal and evaluation of the offer.
- **13.0** The successful tender should furnish well in advance three copies of detailed instruction and manuals of manufacturer's for all items of equipments regarding installation, adjustment operation and maintenance including preventative maintenance and troubleshooting together with all the relevant date sheets, spare parts catalogue etc. all in triplicate.

# 14.0 Extent of Work

- 14.1 The work shall comprise of entire labour including supervision and all material necessary to make a complete installation and such tests and adjustment and commissioning as may be required by the department. The term complete installation shall not only mean major items of the plant and equipments covered by the specification but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been mentioned in details in the tender documents in connection with this contract as this is a **turnkey job**.
- **14.2** In addition to supply, installation, testing and commissioning of AFAS including intelligent addressable FAS equipments, following works shall be deemed to be included with the scope of work to be executed by the tenderer as this is a turnkey job-
  - (a) Minor building works necessary for installation of equipments, foundation making of opening in walls or in floors and restoring them to their original condition / finish and necessary grouting etc. as required.
  - (b) All supports for cable and MS Channel for erection as are necessary.

C.....Nil I.....Nil O.....Nil



15.0 Exclusion and work to be done by other agencies:

The following shall be excluded from the scope of work:

(a) No such work.

# 16.0 Inspection and Testing

- **16.1** The material and equipments shall be offered for initial inspection at manufacturer's works. The contactor will intimate the date of testing of equipments at the manufacturer's work before dispatch. The successful tenderer shall give advance notice of minimum two weeks regarding the dates proposed for such test to the department representative to facilitate his presence during testing. The Engineer- in-charge may witness such testing. The cost of the Engineer visit to the factory will be borne by the Department. Equipments will be inspected at the manufacturer / Authorized Dealers premises before dispatch to the site by the contractor. Nothing extra shall be paid for initial inspection/testing at Manufacture Works.
- **16.2** Copies of all documents of routine and type test certificates of the equipment carried out at the manufactures premises shall be furnished to the Engineer-in- charge and consignee.

# 17.0 VALIDITY

Tenders shall be valid for acceptance for a period 90 days of days from the date of opening of price bid.

# 18.0 COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS :

- **18.1** All works shall be carried out in accordance with relevant regulation both statutory and those specified by the Indian Standards related to the works covered by this specification in particular, the equipment and installation will comply with the following:
- (i) Factories Act.
- (ii) Indian Electricity Rules
- (iii) B.I.S. & other standards as applicable
- (iv) Workmen's compensation Act.
- (v) Statutory norms prescribed by local bodies like fire department, CEA, Power Supply Co. etc.
- **18.2** After completion of the installation the same may be offered for inspection by the representatives of the C.F.O. The contractor will extend all help including test facilities to the representatives of CFO. The observation of CFO will be attended by the contractor.
- **18.3** Nothing in this specification shall be construed to relieve the successful tender of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.

C.....Nil I.....Nil O.....Nil



18.4 Successful tenderer shall arrange for compliance with statutory provisions of safety regulations and departmental requirements of safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirements would make the tenderer liable for penalty of Rs. 200/- for each default. In addition, the department will be at liberty to make arrangement for safety requirements at the cost of tenderer and recover the cost thereof from him.

# 19.0 INDEMNITY

The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the contractor shall be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipments and ancillary equipment under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer on account of the above.

# 20.0 Erection Tools:

No tools and tackles either for unloading or for shifting the equipments for erection purposes would be made available by the department .The successful tender shall make his arrangement for all these facilities

# 21.0 Cooperation with Other Agencies and Occupants of the Building:

The successful tenderer shall co-ordinate with other working contactors, if any and other occupants of different offices / Labs, etc., and exchange freely all technical information so as to make the execution of this work / contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want or cooperation and coordination by the tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of work was not under taken by the tenderer himself.

## 22.0 Mobilization Advance:

No mobilization advance shall be paid for this work

## 23.0 Insurance and Storage:

All consignments are to be duly insured upto the destination from warehouse at the cost of the contractor. The insurance covers shall be valid till the equipment is handed over duly installed, tested and commissioned.

# 24.0 Verification of Correctness of equipments at destination:

The contractor shall have to produce all the relevant records to certify that the genuine equipments from the manufacturers has been supplied and erected. The bidder shall have to submit OEM's letter in support beforehand.

## 25.0 Painting

This shall include cost of painting of the entire installation. The major equipments like C&I Panel, cable trays etc. shall be factory final finish painted. The agency shall be required to do only touching to the damages caused to the painting during transportation, handling & installation at site, if there is no major damage to the

C.....Nil I.....Nil O.....Nil



painting. However hangers, supports etc. of cable tray etc. shall be painted with required shade including painting with two coats of anti corrosive primer paint at site.

# 26.0 Training :

The scope of work includes the on job technical training of two persons of department at site. Nothing extra shall be payable on this account.

# 27.0 Maintenance:

- **27.1** Sufficient trained and experienced staff shall be made available to meet any exigency of work during the guarantee period of one year from the handing over of the installation.
- **27.2** The maintenance, routine as well as preventative for one year from the date of taking over the installation as per manufactures recommendation shall be carried out.

# 28.0 Interpreting Specification:

In interpreting the specification, the following order of decreasing importance shall be followed in case of contradictions:

- (a) Schedule of quantities
- (b) Technical Specification
- (c) Drawing (if any)
- (d) General Specification
- (e) Relevant BIS or other international code in case BIS code is not available.

## 29.0 Pre-Bid Conference / Clarifications

Prospective tenderers may seek clarification on the technical specification and in tender documents that they may consider necessary for submission of tender (technical bid & price bid) through e-mail within 7 days from the date of publishing. All clarification sought for will be summed up and confirmatory minutes for the pre-bid clarifications will be uploaded in the website as corrigendum. Competent authority may also hold pre-bid conference with the prospective bidders if it becomes necessary. The date and time of pre-bid conference will be intimated through mail in that case. It is upto the prospective tenderers to take part in the pre-bid conference. Non-attendance of pre-bid conference does not debar the prospective tenderers form participating and submission of tender. No separate pre-bid conference will be conducted for the firms who do not attend the pre bid conference on the date and time fixed for the purpose.

C.....Nil I.....Nil O.....Nil



# **TECHNICAL SPECIFICATIONS**

- 1. The work shall be carried out as per CPWD General Specifications for Electrical Works Part VI Fire Detection and Alarm System 2018 as amended upto date alongwith the following changes, CPWD general Specifications for Electrical Works Part I, II as amended upto date, relevant IE Rules and as per directions of Engineer-in-Charge.
- 2. INTELLIGENT FIRE ALARM SYSTEM should have minimum 640 character LCD display. Qwerty keypad and minimum 4000 events & 1000 Alarm history log in the nonvolatile memory (EPROM), The panel shall work in degrade mode in case of CPU failure, power supply unit (230 + 5% v, 50 hz), 48 hrs back-up with 24 volt sealed maintenance free batteries with automatic charger. The panel shall have facility to connect printer to printout log and facility to have seamless integration with Digital voice evacuation system and 2 ways Communication Fire Fighters System (which is part of the schedule of work under SH: PA system).
- 3. CENTRAL GRAPHICAL FIRE ALARM MANAGEMENT SYSTEM shall be able to centrally monitor and Control the fire alarm system. The software shall provide the facility to Monitor, Control all the Digital PAVA as well as 2 way communication from main control room using voice signals over Fire Network along with the Fire detection signal. The Graphic workstation shall act as an independent node communicating on the peer to peer network and shall not be dependent on the Fire Panel CPU for operation. Failure of Fire Panel CPU shall not result in failure of GUI.
- 4. INTELLIGENT ANALOG ADDRESSABLE PHOTO THERMAL DETECTOR should be acclimate Type with Auto Floating Sensitivity complete with mounting base complete as required. The detector shall have twin bi-colour LED for 360 deg viewing. Addressing shall be with user friendly rotary decimal switches designed to meet UL268, 7th Edition.
- INTELLIGENT ADDRESSABLE THERMAL DETECTOR with rate of rise cum fixed temperature thermistor complete with base shall have twin bi-colour LED for 360 deg viewing and be designed to meet UL268, 7th Edition.
- INTELLIGENT ADDRESSABLE MULTI CRITERIA [smoke + Heat + CO + IR] detector including suitable photo detector complete with base shall have twin bi-colour LED for 360 deg viewing Designed to meet UL268, 7th Edition.
- 7. ADDRESSABLE MANUAL CALL POINT shall have an LED which shall blink in normal state & get steady on activation to monitor the heath status of the device.
- **8.** ADDRESSABLE HORN CUM STROBE shall be rated at 75 dBA @ 3m for Audible annunciation and 75cd flashing at 1 Hz for visual indication.
- **9.** 6 ZONE, VOICE ALARM CONTROLLER WITH USB, MP3 PLAYER (including 6 zone button paging station) with seamless integration facility with main fire alarm panel for voice evacuation shall be **the same OEM as Fire Alarm Panel.**
- **10.** EXIT POINT DIRECTIONAL SOUND SPEAKER shall have frequency band 20 Hz to 20 kHz with minimum 8 distinct sound patterns to indicate corridors.

LIS	LIST OF ACCEPTABLE MAKE OF MATERIALS / EQUIPMENT				
1	FA Panel, Detector, Graphical Fire Alarm Management System, Repeater Panel, RI, Sounder, PA System	Johnson Control [IFC] / Notifier / XLS-3000			
2	Cable	Finolex / Havells / Gloster			

N.B. : For any other items, need prior approval of the Engineer-in-charge



# << Organization Letter Head >> DECLARATION

I/We,

hereby declare that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I / we have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

1	Name & Address of the bidder	:	
2	Phone	:	
3	E-mail	:	
4	Contact person name	:	
5	Mobile number	:	
6	TIN number	:	
7	PAN number	:	
8	UTR no. [for payment of EMD]	:	
	BANK DETAILS		Bidder shall enclose one cancelled cheque
10	Bank name	:	
11	Branch address	:	
12	Branch telephone no.	:	
13	MICR Code of the bank	:	
14	IFSC code	:	
15	Bank Account no.	:	
16	Type of account	:	
17	Cancelled Blank Cheque enclosed	:	Yes / No

We further declare that our organization has not been blacklisted / delisted or put to any holiday by any Institutional agency / Govt. Department / Public Sector Undertaking in the last three years.

[Signature of the bidder]

Name:

Seal of the bidder

C....Nil 1..... Nil 0..... Nil



#### Annexure - 2

TECHNICAL COMPLIANCE					
SR. NO.	PARAMETER	TENDER REQUIREMENT		BIDDER'S REMARKS	
1	Addressable Fire Alarm Panel				
2.1	Make		Pls specify		
2.2	Model		Pls specify		
2.3	UL Listed	Yes	Pls confirm (Yes / No)		
2.4	FM Approved	Yes	Pls confirm (Yes / No)		
2.5	Display Size	minimum 640 Characters	Pls specify		
2.6	Programmable Keypad	Yes	Pls confirm (Yes / No)		
2.7	Keypad Type	QWERTY	Pls confirm (Yes / No)		
2.8	CPU Degrade Mode	Yes	Pls confirm (Yes / No)		
2.9	Dedicated Event History	4000	Pls specify		
2.10	Dedicated Alarm History	1000	Pls specify		
2.11	Pre-alarm Levels	9	Pls specify		
2.12	Auto Programming of the Panel	Yes	Pls confirm (Yes / No)		
2.13	No of Panels & Loops in Each Panel Considered		Pls submit design basis of loops		
2.14	Min no of Detectors & Devices per loop	240	Pls specify		
2.15	Max no of Detectors & Devices per panel	3000	Pls specify		
2.16	Spare Capacity Considered	20%	Pls specify		
2.17	Inbuilt & Integrated Digital 8 Channel Voice Evacuation & Telephone Talk Back	Yes	Pls confirm (Yes / No)		
2.18	No of Voice Evacuation Zones Considered		Pls submit design basis of zones		
2.19	Cause & Effect Logic Complied	Yes	Pls confirm (Yes / No)		
2.20	Dedicated CPU for DVC [digital voice command]	Yes	Pls confirm (Yes / No)		
2.21	Fire, Voice & Telephone networked on a single network cable	Yes	Pls confirm (Yes / No)		
2.22	Facility of max No of Fire Fighters in Conference	35	Pls specify		
2.23	Paging through any Fire Fighters Phone	Yes	Pls confirm (Yes / No)		
2.24	Minimum No of Nodes on the network	200	Pls specify		
2.25	Minimum No of Networks in the System	200	Pls specify		
2.26	Network Communication Speed on Copper Cable	10 Mbps	Pls specify		
2.27	Network Communication Speed on Fibre	100 Mbps	Pls specify		

[Bidder shall fill in the details and shall have to be submitted with Technical bid]



2.28	Provision of terminating FO cable on network card	Yes	Pls confirm (Yes / No)	
2.29	Battery Charging Capacity	200 Ah	Pls specify	
2.30	Mean Time Between Failure	40	Pls specify	
3	Addressable Active Repeater Panel			
3.1	Make		Pls specify	
3.2	Model		Pls specify	
3.3	UL Listed	Yes	Pls confirm (Yes / No)	
3.4	FM Approved	Yes	Pls confirm (Yes / No)	
3.5	Active Repeater Panel	Yes	Pls confirm (Yes / No)	
3.6	Monitor & Control all Fire Alarm Panels	Yes	Pls confirm (Yes / No)	
3.7	Display Type & Size	Minimum 320 Character	Pls specify	
4	Amplifier			
4.1	Make		Pls specify	
4.2	Model		Pls specify	
4.3	UL Listed	Yes	Pls confirm (Yes / No)	
4.4	FM Approved	Yes	Pls confirm (Yes / No)	
4.5	No of Amplifiers & Capacity of Each Amplifier Considered		Pls submit design basis Wattage & Amplifier	
4.6	Amplifier Type	Digital	Pls confirm (Yes / No)	
4.7	Distributed Architechture of Amplifiers	Yes	Pls confirm (Yes / No)	
4.8	Back-up Amplifier considered, N+1 Redundancy	Yes	Pls confirm (Yes / No)	
4.9	Amplifier not dependant on Fire panel CPU	Yes	Pls confirm (Yes / No)	
6	Cranhias Ilaar Interface			
6	Graphics User Interface		Dia anasif <i>u</i>	
<u>6.1</u> 6.2	Make Model		Pls specify	
6.3	UL Listed	Yes	Pls specify Pls confirm (Yes / No)	
<u> </u>	FM Approved	Yes	Pls confirm (Yes / No)	
6.5	Complete Monitoring & Control Feature for Fire, Voice & Telephone talkback	Yes	Pls confirm (Yes / No)	
6.6	Capability of detector sensitivity changing	Yes	Pls confirm (Yes / No)	
6.7	Minimum Network Points to be mapped	2,50,000	Pls specify	
6.8	Minimum Event History	1,00,000	Pls specify	
6.9	Graphics User Interface as a node on peer-to-peer network	Yes	Pls confirm (Yes / No)	
6.10	Facility of paging on selected zone through GUI	Yes	Pls confirm (Yes / No)	
10	Addressable Multi-criteria			



	Detector with Base			
10.1	Make		Pls specify	
10.2	Model		Pls specify	
10.3	UL 268, 7th Edition Listed		Pls confirm (Yes / No)	
10.4	FM Approved		Pls confirm (Yes / No)	
10.5	Smoke Element Sensitivity Range	0.5% to 2.5% obs/ft	Pls specify	
10.6	Heat Element Temperature	57 deg C	Pls specify	
10.7	Dual bi-color LED Indication for 360 deg Viewing		Pls confirm (Yes / No)	
10.8	Addressing Method	Rotary Switch	Pls specify	
11	Addressable Heat Detector			
11.1	Make		Pls specify	
11.2	Model		Pls specify	
11.3	UL 268, 7th Edition Listed		Pls confirm (Yes / No)	
11.4	FM Approved		Pls confirm (Yes / No)	
11.5	Heat Element Sensitivity Range for Fixed	58 deg C	Pls specify	
11.6	Heat Element Sensitivity Range for Rate of Rise	9.4 deg C / min	Pls specify	
11.7	Dual bi-color LED Indication for 360 deg Viewing		Pls confirm (Yes / No)	
11.8	Addressing Method	Rotary Switch	Pls specify	
12	Addressable Duct Smoke Detector with Housing			
12.1	Make		Pls specify	
12.2	Model		Pls specify	
12.3	UL Listed		Pls confirm (Yes / No)	
12.4	FM Approved		Pls confirm (Yes / No)	
12.5	Smoke Element Sensitivity Range	0.5% to 2.5% obs/ft	Pls specify	
12.6	Air Velocity	100 to 4000 ft/min	Pls specify	
12.7	Dual bi-color LED Indication for 360 deg Viewing		Pls confirm (Yes / No)	
12.8	Addressing Method	Rotary Switch	Pls specify	
13	Addressable High Sensitivity Spot Type Smoke Detector			
13.1	Make		Pls specify	
13.2	Model		Pls specify	
13.3	UL 268, 7th Edition Listed		Pls confirm (Yes / No)	
13.4	FM Approved		Pls confirm (Yes / No)	
13.5	Smoke Element Sensitivity Range	0.02 to 2% obs/ft	Pls specify	
13.6	Dual bi-color LED Indication for 360 deg Viewing		Pls confirm (Yes / No)	
13.7	Addressing Method	Rotary Switch	Pls specify	
14	Addressable Advanced Multi-			



	criteria Detector			
14.1	Make		Pls specify	
14.2	Model		Pls specify	
14.3	UL 268, 7th Edition Listed		Pls confirm (Yes / No)	
14.4	FM Approved		Pls confirm (Yes / No)	
14.5	Smoke Element Sensitivity Range	0.5% to 2.5% obs/ft	Pls specify	
14.6	Heat Element Sensitivity Range for Fixed	58 degC	Pls specify	
14.7	Inbuilt CO Sensor	Yes	Pls confirm (Yes / No)	
14.8	Inbuit IR Sensor	Yes	Pls confirm (Yes / No)	
14.9	Dual bi-color LED Indication for 360 deg Viewing		Pls confirm (Yes / No)	
14.10	Addressing Method	Rotary Switch	Pls specify	
15	Addressable Beam Detector			
15.1	Make		Pls specify	
15.2	Model		Pls specify	
15.3	UL Listed		Pls confirm (Yes / No)	
15.4	FM Approved		Pls confirm (Yes / No)	
15.5	Total Sensitivity Levels	6	Pls specify	
15.6	Sensitivity Percentage	25% to 50%	Pls specify	
15.7	Detection Range	100 mtrs	Pls specify	
16	Addressable Manual Call Point			
16.1	Make		Pls specify	
16.2	Model		Pls specify	
16.3	UL Listed		Pls confirm (Yes / No)	
16.4	FM Approved		Pls confirm (Yes / No)	
16.5	Dual Action		Pls confirm (Yes / No)	
16.6	LED Indication		Pls confirm (Yes / No)	
16.7	Addressing Method	Rotary Switch	Pls specify	
17	Addressable Control Module			
17.1	Make		Pls specify	
17.2	Model		Pls specify	
17.3	UL Listed		Pls confirm (Yes / No)	
17.4	FM Approved		Pls confirm (Yes / No)	
17.5	Contact Rating		Pls specify	
17.6	LED Indication	Yes	Pls confirm (Yes / No)	
17.7	Addressing Method	Rotary Switch	Pls specify	
18	Addressable Monitor Module			
18.1	Make		Pls specify	
18.2	Model		Pls specify	
18.3	UL Listed		Pls confirm (Yes / No)	
18.4	FM Approved		Pls confirm (Yes / No)	
18.5	Contact Rating		Pls specify	
18.6	LED Indication	Yes	Pls confirm (Yes / No)	
18.7	Addressing Method	Rotary Switch	Pls specify	

C.....Nil I.....Nil O.....Nil



Isolator Module			
Make		Pls specify	
Model			
UL Listed			
FM Approved		Pls confirm (Yes / No)	
Contact Rating		Pls specify	
LED Indication	Yes	Pls confirm (Yes / No)	
Automatic Reset	Yes	Pls confirm (Yes / No)	
Addressable Hooter/Sounder cum Strobe			
Make		Pls specify	
Model		Pls specify	
UL Listed		Pls confirm (Yes / No)	
FM Approved		Pls confirm (Yes / No)	
Max Decibel Rating	75 dBA @ 3 mtrs	Pls specify	
Max Candella Rating	75 Cd @ 1 Hz	Pls specify	
Addressable Directional Sounder			
Make			
Model			
		Pls confirm (Yes / No)	
	20 Hz to 20K Hz	Pls specify	
, , , , , , , , , , , , , , , , , , ,	90 dBA @ 3 mtrs	Pls specify	
Pre-programmed Voice Messages	Yes	Pls confirm (Yes / No)	
Compliance to NFPA 72, 2016 - Clause A.18.4.7.1	Yes	Pls confirm (Yes / No)	
Speakers			
· ·		Ple specify	
		· · · · · · · · · · · · · · · · · · ·	
Addressable Telephone Jack Module			
Make		Pls specify	
Model		Pls specify	
UL Listed		Pls confirm (Yes / No)	
FM Approved		Pls confirm (Yes / No)	
LED Indication	Yes	Pls confirm (Yes / No)	
Telephone Jack			
Make		Pls specify	
Model			
UL Listed		Pls confirm (Yes / No)	
	Make         Model         UL Listed         FM Approved         Contact Rating         LED Indication         Automatic Reset         Addressable Hooter/Sounder cum         Strobe         Make         Model         UL Listed         FM Approved         Max Decibel Rating         Max Candella Rating         Make         Model         UL Listed         FM Approved         Max Candella Rating         Make         Model         UL Listed         FM Approved         Frequency Band         Max Decibel Rating         Pre-programmed Voice Messages         Compliance to NFPA 72, 2016 -         Clause A.18.4.7.1         Speakers         Make         Model         UL Listed         FM Approved         Wattage         Addressable Telephone Jack         Model         UL Listed         FM Approved         Lied         FM Approved         UL Listed         FM Approved         LED Indication	Make       Model         Model       Indication         Ves       Yes         Automatic Reset       Yes         Addressable Hooter/Sounder cum       Strobe         Make       Model         Model       Indication         Yes       Yes         Addressable Hooter/Sounder cum       Strobe         Make       Indication         Model       Indication         UL Listed       FM Approved         Max Candella Rating       75 dBA @ 3 mtrs         Max Candella Rating       75 Cd @ 1 Hz         Addressable Directional Sounder       Make         Model       Intra to 20 K Hz         Vactor Vactor Make       Intra to 20 K Hz         Model       Intra to 20 K Hz         Vactor Vactor Max Decibel Rating       90 dBA @ 3 mtrs         Pre-programmed Voice Messages       Yes         Compliance to NFPA 72, 2016 -       Yes         Clause A.18.4.7.1       Yes         Make       Indication         Make       Indication         Make       Indication         Make       Indication         Make       Indication         Yes       Indication <t< td=""><td>Make       Pls specify         Model       Pls specify         UL Listed       Pls confirm (Yes / No)         FM Approved       Pls confirm (Yes / No)         Contact Rating       Pls specify         LED Indication       Yes         Automatic Reset       Yes         Addressable Hooter/Sounder cum       Pls specify         Make       Pls specify         Model       Pls specify         UL Listed       Pls specify         Make       Pls specify         Model       Pls specify         UL Listed       Pls specify         Make       Pls specify         Max Decibel Rating       75 dBA @ 3         Max Candella Rating       75 Cd @ 1 Hz         Max Candella Rating       75 Cd @ 1 Hz         Make       Pls specify         Model       Pls specify         Make       Pls specify         Max Decibel Rating       90 dBA @ 3 mtrs         Pre-programmed Voice Messages       Yes         <t< td=""></t<></td></t<>	Make       Pls specify         Model       Pls specify         UL Listed       Pls confirm (Yes / No)         FM Approved       Pls confirm (Yes / No)         Contact Rating       Pls specify         LED Indication       Yes         Automatic Reset       Yes         Addressable Hooter/Sounder cum       Pls specify         Make       Pls specify         Model       Pls specify         UL Listed       Pls specify         Make       Pls specify         Model       Pls specify         UL Listed       Pls specify         Make       Pls specify         Max Decibel Rating       75 dBA @ 3         Max Candella Rating       75 Cd @ 1 Hz         Max Candella Rating       75 Cd @ 1 Hz         Make       Pls specify         Model       Pls specify         Make       Pls specify         Max Decibel Rating       90 dBA @ 3 mtrs         Pre-programmed Voice Messages       Yes <t< td=""></t<>

C.....Nil I.....Nil O.....Nil



### Annexure - 3

### SCHEDULE of programme of work

### [Bidder shall fill the programme & to be submitted with Technical Bid]

<u>S. No.</u>	Details of Items	Months 1	2	3	4	5	6	7	8	9	<u>10</u>
(a)	Supply of drawings for approval.										
(B)	Bringing equipment / material to site										
	1. Trigger devices										
	2. Control and indicating panels										
	3. Mimic diagrams										
	4. High / low intensity sounders										
	5. Battery unit										
	6. Wiring materials										
	7. All other items										
(c)	Installation / testing and commissioning										

Signature of Tenderer

C.....Nil I.....Nil O.....Nil



# **IITD - 2010 CORRECTION SLIPS**

In General condition of contract for IIT Delhi works department 2010 -

Reference	Existing	Modified
Clause	Before any installment of advance is released, the	Before any installment of advance is released,
10B	contractor shall execute a Bank Guarantee Bond from Scheduled Bank for the amount of	the contractor shall execute a Bank Guarantee Bond from Scheduled Bank for the amount
(ii),	<b>advance &amp;</b> valid for the contract period. This shall be kept renewed from time to time to cover the	equal to 110% of the amount of advance and valid for the contract period. This (Bank
Para-2	balance amount and likely period of complete recovery, together with interest.	Guarantee from Scheduled Bank for the amount equal to 110% of the balance amount of advance) shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery.
Clause 3 (vii)	If the contractor shall obtain a contract with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering.	If the contractor had secured the contract with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.

Reference	Existing Provision	Modified Provision
Page 5, IITD 2010	Page 5, IITD 2010 4A. Applicable for Percentage Rate Tender only (IITD-7) In case of Percentage Rate Tenders,a tenderer shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.	<ul> <li>Page 5, IITD 2010</li> <li>4A. Applicable for Percentage Rate Tender only (IITD-7)</li> <li>In case of Percentage Rate Tenders, contractor shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. The tender submitted shall be treated as invalid if :-</li> <li>1. The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender.</li> <li>2. The percentage above/below is not quoted in figures &amp; words both on the total amount of tender.</li> <li>3. The percentage quoted above/below is different in figures &amp; words on the total amount of tender.</li> <li>3. The percentage quoted above/below is different in figures &amp; words on the total amount of tender.</li> <li>3. The percentage quoted above/below is different in figures &amp; words on the total amount of tender.</li> <li>3. The percentage quoted above/below is different in figures &amp; words on the total amount of tender.</li> </ul>

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	<ul> <li>carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarity rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.</li> <li>New Para 4B is added as below:</li> <li>4B: In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/ below) of two or more contractors is same, such howest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on tendered cost or tendered including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of frevised offers.</li> <li>In case any of such contractor refuses to submit revised offer is again found to be equal, the lowest tender amound of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SL of the circle, EE(s) in-charge of major &amp; minor component(s) (also DDH in case all the lowest contractors those have quoted equal amount of twices to submit revised offers.</li> <li>In case all the lowest contractors those have quoted act the tore, is all be lowest contractors those have quoted equal amount of the inders. In case all the lowest contractors those have quoted equal amount of the inders.</li> <li>In case all the lowest contractors those have quoted equal amount of the inders.</li> <li>In case all the lowest contractors those have quoted because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.</li> </ul>
Reference	Existing Provision Modified Provision
10A	In case of Percentage Rate Tenders only In case of Percentage Rate Tenders only

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Tender Document for Augmentation of FD System at IIT Delhi

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(page 6-7)	percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy. However if the contractor has worked out the amount of the tender and if any discrepancy is found in the percentage quoted in words and figures, the percentage which corresponds with the amount worked out by the contractor shall, unless otherwise proved, be taken as correct. If the amount of the tender is not worked out by the contractor or it does not correspond with the percentage written either in figures or in words, then the percentage quoted by the contractor in words shall be taken as correct. Where the percentage quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the percentage quoted by the contractor will, unless otherwise proved, be taken as correct and not the amount.	percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy. (Remaining part deleted)
Reference	Existing Provisions	Modified Provisions
Deviations/ Variations Extent and Pricing	<b>CLAUSE 12</b> The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do	<b>CLAUSE 12</b> The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which

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	the main works except as hereafter provided.	he agreed to do the main works except as hereafter provided. The completion cost of any agreement for Maintenance works including works of upgradation, aesthetic, special repair, addition/ alteration shall not exceed 1.25 times of Tendered amount.
Deviations, Extra Items, Pricing	12.2 In the case of extra items (items that are completely new and are in addition to the items contained in the contract), the contractor may within 09 months of receipt of order or occurrence of the item(s) claim rate, supported by proper analysis, for the work and the Engineer-in-charge shall within one month of the receipt of the claims supported by analysis after giving considerations to the analysis of the rates submitted by the contractor, determined the rates on basis of market rates and the contractor shall be paid in accordance with the rates so determined.	<ul> <li>12.2</li> <li>A. For Project and original works: <ul> <li>In the case of extra items (items that are completely new and are in addition to the items contained in the contract), the contractor may within 09 months of receipt of order or occurrence of the item(s) claim rate, supported by proper analysis, for the work and the Engineer-in-charge shall within one month of the receipt of the claims supported by analysis after giving considerations to the analysis of the rates submitted by the contractor, determined the rates on basis of market rates and the contractor shall be paid in accordance with the rates so determined.</li> </ul> </li> <li>B. For Maintenance including works of upgradation, aesthetic, special repair, addition/ alteration: <ul> <li>In the case of Extra Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plush cost index (at the time of tender) plus/minus percentage above below quoted contract amount.</li> <li>Payment of Extra items in case of non-schedule items (Non-DSR items) shall be made as per the prevailing market rate.</li> </ul> </li> </ul>
Deviation, Substituted Items, Pricing	In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following Para.	A. For Project and original works: In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in

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	<ul> <li>(a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).</li> <li>(b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the</li> </ul>	<ul> <li>the manner as mentioned in the following Para.</li> <li>(a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).</li> </ul>
	rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted)	(b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted). For Maintenance including works of up-gradation, aesthetic, special repair, addition/ alteration:
		In the case of Substitute Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plush cost index (at the time of tender) plus/minus percentage above below quoted contract amount. Payment of Extra items in case of non- schedule items (Non-DSR items) shall be
Deviation,	In the case of contract items, substituted items,	made as per the prevailing market rate. A. For Project and original works:
Deviated Quantities, Pricing	contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates	In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of

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submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.	<ul> <li>receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.</li> <li>B. For Maintenance including works of up-gradation, aesthetic, special repair, addition/ alteration:</li> <li>In the case of contract items, which exceed the limit laid down in schedule F, the contractor shall be paid rates specified in the schedule of quantities.</li> </ul>
12.3 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.	12.3 <b>A.</b> For Project and original works: The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work excess of the limits laid down in Schedule F, and the Engineer-in- Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.
	<ul> <li>B. For Maintenance including works of upgradation, aesthetic, special repair, addition/ alteration:</li> <li>In the case of decrease in the rates Prevailing in the market of items for the the work excess of the limits laid down in Schedule F, and the</li> <li>Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work</li> </ul>



		said period of fifteen days having regard to the market rates.
Schedule F	Clause 12	Clause 12
	No provision.	Type of work ***
		*** To be filled by NIT approving authority either Project and original work or Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration.

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<sup>.</sup> INII



## **BID SUBMISSION**

### ONLINE BID SUBMISSION:

The Online bids (complete in all respect) must be uploaded online in two Envelops as explained below:-

SI. No.	SI. No. Documents Content				
1	Technical Bid	Organization Declaration Sheet as per Annexure - I	.PDF		
2		Annexure 2 [Technical Particulars] & Annexure 3 neatly typed	.PDF		
3		CA Certificate for Turnover			
4		Attested Certificate of work experience as desired	.PDF		
5		Certificate of registration for GSTIN	.PDF		
6		Affidavit as per NIT condition 1.2.2 on stamp paper	.PDF		
7		Acceptance to execute integrity pact	.PDF		
8		IITD 7/8 duly signed by the bidder	.PDF		
9		EPFO & ESIC Registration proof with upto date challan	.PDF		
10		NSIC / MSME Certificate, if the bidder claims for EMD exemption	.PDF		
11		Product Brochure & any other document as specified in the NIT	.PDF		
	Envelope – 2				
SI. No.	TYPES	Content			
1.	Financial Bid	Price bid should be submitted in BOQ format.	.EXL		

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## SCHEDULE OF QUANTITY

### Name of work: Augmentation of Fire Detection System in M.S. Building at IIT Delhi

Item No.	Description of Item	Qty	Unit	Rate	Amount
	SUB HEAD - 1				
1.00	INTELLIGENT FIRE ALARM SYSTEM				
	Supplying, installation, testing and commission of fire micro processor based intelligent addressable main fire alarm panel, central processing unit with the following loop modules and capable of supporting not less then 240 device (including detector) and minimum 120 detector per loop and loop length up to 2 km, network communication card , minimum 320 character graphics / LCD display with touch screen or other keypad and minimum 4000 events history log in the non volatile memory (EPROM), power supply unit (230 + 5% v, 50 hz), 48 hrs back-up with 24 volt sealed maintenance free batteries with automatic charger. The panel shall have facility to connect printer to printout log and facility to have seamless integration with analog / digital voice evacuation system ( which is part of the schedule of work under SH: PA system) and shall be complete with all accessories. The panel shall be compatible for IBMS system with open protocol BACnet / Modbus over IP complete as per specifications.				
1.01	Ten Loop Panel	2	Each		
1.02	Two Loop Panel	1	Each		
2	Supplying, installation, testing & commissioning of central graphical fire alarm management system to centrally monitor and operate the fire alarm system complete as required as per specifications.	1	Each		
3	Supplying, installation, testing & commissioning of repeater panel with 320 character / Touch screen LCD display with inbuilt reset, acknowledge and silence switches complete as required as per specifications.	1	Each		
4	Supplying, installation, testing & commissioning of intelligent analog addressable photo thermal detector complete with mounting base complete as required as per specifications.	2300	Each		
5	Supplying, installation, testing & commissioning of response indicator on surface / recessed MS box having two LED, metallic cover complete with all connection etc as required as per specifications.	400	Each		
6	Supplying , installation, testing & commission of intelligent addressable programmable sounder complete as required as per specifications.	30	Each		

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7	Supplying, installation, testing & commissioning of fault			
	isolator complete with base as required as per specifications.	170	Each	
8	Supplying, installation, testing & commissioning of intelligent addressable thermal detector with rate of rise cum fixed temperature thermistor complete with base as required as per specifications.	400	Each	
9	Supplying, installation, testing & commissioning of addressable fire control module complete as required as per specifications.	60	Each	
10	Supplying, installation, testing & commissioning of addressable phone control module complete as required as per specifications.	50	Each	
11	Supplying, installation, testing & commissioning of addressable beam detector with short circuit isolator (inbuilt of separate) complete with emitter and receiver including connections with remote test features etc complete as required as per specifications.	0	Fach	
12	Supplying, installation, testing & commissioning of intelligent	8	Each	
12	addressable duct detector including suitable photo detector complete with base as required as per specifications.	40	Each	
13	Supplying, installation, testing & commissioning of intelligent addressable multi criteria [smoke + Heat + CO + IR] detector including suitable photo detector complete with base as required as per specifications.	5	Each	
14	Supplying, installation, testing & commissioning of intelligent addressable High Sensitivity Photo Detector with sensitivity level of 0.02% to 2% Obs/Feet. The detector shall have the parabolic amplifier to focus the light beam to a very small volume near the receiving photo sensor at the incipient stage of fire- when the smoke particles are lesser than 0.3 microns intrudes inside the detection chamber & shall have better response time at much earlier stage of fire. The detector shall have twin bi-colour LED for 360 deg viewing. Addressing shall be with user friendly rotary decimal switches as per specifications.	20	Each	
15	Supplying, installation, testing & commissioning of addressable manual call point complete as required as per specifications.	150	Each	
16	Supplying, installation, testing & commissioning of addressable horn cum strobe complete as required as per specifications.	30	Each	
17	Supplying, installation, testing & commissioning of addressable strobe complete as required as per specifications.	30	Each	
18	Supplying, installation, testing & commissioning of fire fighter telephone handset complete as required as per specifications.	4	Each	
19	Supplying, installation, testing & commissioning of fire fighter phone jack complete as required as per specifications.	4	Each	

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20	Supplying, installation, testing & commissioning addressable Relay Module for AHU, Access Control, Lifts, Staircase Pressurization, Fire Suppression & other Third Party Outputs. The relay module shall provide DPDT contact rated at 24v DC, 2A. The device shall have an LED which shall blink in normal state & get steady on activation to monitor the heath status of the device. Addressing shall be with user friendly rotary decimal switches. Module shall be supplied with mounting plate from OEM for ease of installation & maintenance as per specifications.	10	Each	
	PUBLIC ADDRESS SYSTEM		20011	
21	Supplying, installation, testing & commissioning of 6 zone, voice alarm controller with USB, MP3 player (including 6 zone button paging station) with seamless integration facility with main fire alarm panel for voice evacuation complete as required as per specifications.	2	Each	
22	Supplying, installation, testing & commissioning of 1.5/3/6W	Z	Laun	
	ceiling speaker complete as required as per specifications	150	Each	
23	Supplying, installation, testing & commissioning of 1.5/3/6W metal box ceiling/ speakers complete as required as per specifications.	150	Each	
24	Supplying, installation, testing & commissioning of ceiling/wall mounted loud speaker, 3/1.5 watt in ABS enclosure complete as required as per specifications.	30	Each	
25	Supplying, installation, testing & commissioning of 6 inches dia, 2 watts, 70/100 volts ceiling speaker complete as required as per specifications.	50	Each	
26	Supplying, installation, testing & commissioning of digital audio amplifier 50 watt, 25V rms operating at 240 volt AC supply complete as required as per specifications.	3	Each	
27	Supplying, installation, testing & commissioning of digital audio amplifier 75 watt, 25V rms operating at 240 volt AC supply complete as required as per specifications.	3	Each	
28	Supplying, installation, testing & commissioning of exit point directional sound speaker with voice and integral audio amplifier with sound pulse patterns complete as required as per specifications.	30	Each	
29	Supplying, installation, testing & commissioning of voice command keypad 6 zone, with microphone assembly complete as required as per specifications. CABLING & WIRING	1	Each	
30	Supplying & laying of 2x1.5 sqmm fire survival armoured cable, 600/1000V rated with annealed copper conductor having glass mica fire barrier tape covered by an extruded layer of cross linkable ethylene propylene rubber (EPR) insulation and LSZH inner bedding, steel wire armoring & LSZH outer sheath complete as required.	3500	Metre	
31	Supplying & laying of 2x1.5 sqmm fire survival armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outer sheath complete as required.	10000	Metre	

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32	supplying and drawing of cable fire retardant PVC insulated copper conductor cable in the exiting surface / recessed steel conduit of following pairs, cores and size including connections and interconnections etc. as required			
32.01	Speaker cable single pair, 2-core,1.5 sqmm	7500	Metre	
32.02	Speaker cable two pair, 2-core, 1.5 sqmm	2000	Metre	
32.03	Speaker cable three pair, 2-core, 1.5 sqmm	1500	Metre	
32.04	Speaker cable four pair, 2-core, 1.5 sqmm	1000	Metre	
33	Supplying and fixing 25 mm dia MS flexible pipe with PVC coating along with all ancillaries and accessories like coupler etc. as required	2000	Metre	
34	Supplying, installation, testing and commission of cloud based facility management software for remote health monitoring utilizing cloud based software-as-a-service web application and supplementary network gateway software. System shall provide secure web access to cloud based web application using any of the web browsers like Google Chrome (preferable), Internet Explorer etc. from any computer/ tablet/ Smartphone connected over internet via defined credentials – username and password. The cloud based web application shall capture all fire alarm system data as received from the system via supplementary gateway hardware of the same make as Fire Alarm Panel. The software shall display real time view of fire system effectiveness, multi-location unified view, custom dashboard, device level information, 100000 events, scheduled reporting, e-mail of critical alarms as per specifications.	1	Each	
35	Dismantling of the old fire detection system including removing of cable, detector, call points, R.I.s, Panels, etc. mending good the damages and dumping all dismantled items at a designated place in IIT Delhi etc. as directed.			
	SUB TOTAL - "A"	1	Job	

36	Buy back of old dismantled Fire Detection System components:			
36.01	Detector [approx 2000 nos]	1	Lot	
36.02	Call Point [approx 20 nos]	1	Lot	
36.03	R.I. [approx 250 nos]	1	Lot	
36.04	Cable [approx 9000 metre of different sizes]	1	Lot	
36.05	Hooter [ approx 70 nos]	1	Lot	
36.06	Panel [approx 12 nos]	1	Lot	
	SUB TOTAL "B" [reserve price]			

[Supplementary Agreement shall be formed for Sub Head 2]

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	Sub Head - 2 ( Round the Clock Monitoring & Maintenance)			
1.00	Routine, preventive and breakdown maintenance & round the clock x 7 days monitoring of installed Fire Detection & Alarm system by deputing skilled technical [minimum ITI Electrical / Electronics / Instrumentation passed] person[s] who shall be vigilant and be available round the clock x 7 days etc. as required. [N.B [a] Materials, if any, required due to fault / malfunction of the system beyond DLP to be given by the Institute & to be replaced by the contractor [b] Attendance of deputed staff shall be maintained through manual as well as biometric machine to be kept in the fire control room [c] any shortfall of attendance of staff will affect the billing proportionately [d] Latest Labour regulation shall be complied strictly]. <b>1 Job means for a period of 01 month</b>			
1.01	2nd year [after Defect Liability Period (DLP) of 01 year which is free of cost]	12	Job	
1.02	3rd year [after DLP]	12	Job	
1.03	4th year [after DLP]	12	Job	
1.04	5th year [after DLP]	12	Job	
	SUB TOTAL "C"			

TOTAL [A - B + C] Rs.

[N.B. Bidder should not quote rates here]

Executive Engineer [E]

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