

**Government of India**  
**Ministry of Communication**  
**Department of Posts – Civil Wing**  
**Postal Electrical Division, Bengaluru-560 004**  
Email ID-eeepedbgl@gmail.com

**Name of work : SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor  
Daksadan Hyderabad**

**NIT No. 07/EEE/PED/BGL/2026-27**

**Dated : 13.05.2026**

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**This NIT contains 48 pages (Tender documents page1 to 47 and BOQ 1 pages)**

Issued to : \_\_\_\_\_

Signature of officer issuing the documents

Designation

Executive Engineer(E)  
Postal Electrical Division  
Bengaluru

Date of issue: - \_\_\_\_\_

## **INSTRUCTIONS TO THE CONTRACTORS/BIDDERS FOR E-SUBMISSION OF THE BIDS ONLINE THROUGH TENDER SITE**

**<https://eprocure.gov.in/eprocure/app>**

This tender document has been published on the Central Public Procurement Portal (URL: <https://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: <https://eprocure.gov.in/eprocure/app>.

### **REGISTRATION**

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "Click here to Enroll" on the CPP Portal. Enrolment 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 DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

### **SEARCHING FOR TENDER DOCUMENTS**

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include organization name, location, date, value, etc. There is also an option of advanced search for tenders, 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 tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each 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 tender document before submitting their bids. Please go through the tender advertisement and the 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.
- 2) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / JPEG formats.
- 3) 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 Document" area available to them to upload such documents. These documents may be directly submitted from the "My Document" 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 tender document.
- 3) Bidder has to select the payment option as "offline" to pay the EMD and enter details of DD/any other accepted instrument.
- 4) **Bidder should prepare the EMD as per the instructions specified in the tender document (Please refer page No.13 for offline and online mode)**

- 5) The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders. The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected.
- 6) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. The price bid has been given as a standard BoQ format (BoQ\_xxxx.xls) with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the green colored (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.
- 7) 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. The bidders are requested to submit the bids through online e-tendering system to the TIA well before the bid submission end date & time (as per Server System Clock).
- 8) 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.
- 9) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 10) 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.
- 11) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

#### **ASSISTANCE TO BIDDERS**

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the TIA i.e. Executive Engineer(E), Postal Electrical Division, Bengaluru inviting the tenders.
- 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 **0120-4711508 / 4001002 / 6277787 and amp; Email ID : support-[eproc@nic.in](mailto:support-eproc@nic.in) & [cpp-nin@nic.in](mailto:cpp-nin@nic.in).**

**INFORMATION AND INSTRUCTIONS FOR EXECUTIVE ENGINEERs FOR E-TENDERING**

- 1 The Executive Engineer of all Postal Civil/Electrical Divisions should receive the original EMD for tender of other division.
- 2 The Executive Engineer at the time of issue of NIT shall also fill and upload the following prescribed format of receipt of deposition of original EMD along with NIT:

**FORMAT FOR RECEIPT OF DEPOSITION OF ORIGINAL EMD**

Receipt of deposit of original EMD

**Receipt No.**

**Dated:**

- |                                     |   |
|-------------------------------------|---|
| 1. Name of work:                    | <b>SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor Daksadan Hyderabad.</b> |
| 2. NIT No.:                         | <b>07/EEE/PED/BGL/2026-27</b>   |
| 3. Estimated Cost:                  | <b>909541</b>   |
| 4. Amount of Earnest Money Deposit: | <b>18191</b>  |
| 5. Last date of submission of bid:  | <b>20.05.2026 upto 15.00 hrs.</b>   |

- 
- |                                    |        |
|------------------------------------|--------|
| 1. Name of Contractor              | .....# |
| 2. Form of EMD                     | .....# |
| 3. Amount of Earnest Money Deposit | .....# |
| 4. Date of submission of EMD       | .....# |
- 

Signature, Name and Designation  
of EMD receiving Officer  
(EE/AE(P)/AE/AO/AAO) along with Office Stamp

**(# To be filled by EMD receiving Officer)**

1. The Executive Engineer receiving EMD in original form shall examine the EMD deposited by the bidder and shall issue a receipt of deposition of earnest money to the agency in a given format uploaded by tender inviting EE. The receipt may be issued by the AE/AO.
- 2, The Executive Engineer receiving original EMD shall also intimate tender inviting Executive Engineer about deposition of EMD by the agency by e-mail/ Fax/ telephonically.
3. The original EMD receiving Executive Engineer shall release the EMD after verification from the e-tendering portal website (<https://eprocure.gov.in/eprocure.app> tender Status> AOC for the tender ID to be obtained from the tender inviting Executive Engineer) that the particular contractor is not L-1 tenderer and work is awarded.
4. The tender inviting Executive Engineer will call for original EMD of the L1 tenderer from EMD receiving Executive Engineer immediately.
5. List of Executive Engineers along with address where EMD can be deposited is enclosed as Annexure-I.

**LIST OF EXECUTIVE ENGINEERS (C/ E) WITH ADDRESS**

The Executive Engineer (C) Postal Civil Division, GPO Building , Ambala-133001 0171- 2645721	The Executive Engineer (C) Postal Civil Division, R.N. Compound, Opp. Raj Bhawan, Shillong-793001, 0364 – 2224398	The Executive Engineer (C) Postal Civil Division, 2nd Floor, HPO Building, MG Road Rajkot-360001 0281- 2228933
The Executive Engineer (C) Postal Civil Division, PO Building, 1st Floor, Summer Hill, Shimla- 171005 0177 – 2832943	The Executive Engineer (C) Postal Civil Division, 1st Floor, RT Nagar HPO Bengaluru-560032, 080- 23332025	The Executive Engineer (C) Postal Civil Division, 2nd Floor, HPO Building Shastri Nagar, Jaipur – 302016 0141-2365941
The Executive Engineer (C) Postal Civil Division, HPO Bldg. Civil Lines, Allahabad-211001, 0532- 26221100	The Executive Engineer (C) Postal Civil Division, K.C. Park PO Compound, Dharwad- 580008, 0836 – 2445252	The Executive Engineer (C) Postal Civil Division,5th Floor, C.T.T. Nagar, PO Building Bhopal-462003 0755- 2779149
The Executive Engineer (C) Postal Civil Division, PO Building, Sector-C, Aliganj, Lucknow-226024, 0522 – 2335165/2324419	The Executive Engineer (C) Postal Civil Division, No. 5, EthirajSalai, Chennai-600008, 044- 28203435	The Executive Engineer (E) Postal Electrical Division-I, 10th floor, Meghdoot Bhawan, New Delhi-110001, 011- 23678955
The Executive Engineer (C) Postal Civil Division, Postal Colony, Roop Nagar, Jammu-180013, 0191- 2592924	The Executive Engineer (C) Postal Civil Division, Manacaud P.O. Trivandrum-6910009, 0471 – 2466748	The Executive Engineer (E) Postal Electrical Division-II, 10th floor, Meghdoot Bhawan, New Delhi -110001, 011-23514049
The Executive Engineer (C) Postal Civil Division, Meghdoot Bhawan, New Delhi -110001, 011- 23628366	The Executive Engineer (C) Postal Civil Division, Sion PO Building, Mumbai-400022, 022 – 24013900	The Executive Engineer (E) Postal Electrical Division, Yogayog Bhawan, P-36, CR-Avenue, Kolkata- 700012, 033-22120646, 22120637
The Executive Engineer (C) Postal Civil Division, Meghdoot Bhawan, GPO Compound, Patna-800001, 0612 – 2226070/2233936	The Executive Engineer (C) Postal Civil Division, Khadki PO Compound, Pune-411003 020-25817762	The Executive Engineer (E) Postal Electrical Division, PO Building, Sector-C, Aliganj, Lucknow-226024 0522 – 2336053
The Executive Engineer (C) Postal Civil Division, 3rd floor, Postal Store Depot building, satyanagar, Bhubaneswar – 751 007 0674 – 2570960	The Executive Engineer (C) Postal Civil Division, Akashwani Square, DA(P) Compound, Nagpur-400010 0712-2540368	The Executive Engineer (E) Postal Electrical Division 2nd Floor, Basavanagudi HPO Bengaluru - 560004 080 – 26676804
The Executive Engineer (C) Postal Civil Division, Yogayog Bhawan, P-36, CR- Avenue, Kolkata-700012, 033 – 22121441/ 22121280	The Executive Engineer (C) Postal Civil Division, Gandhi Nagar PO Building, Hyderabad- 500080 040- 23463910/ 909/ 908	The Executive Engineer (E) Postal Electrical Division 3rd Floor, Sion PO Building Mumbai-400022 022 - 24044164
The Executive Engineer (C) Postal Civil Division, Meghdoot Bhawan Complex, Guwahati-781001 0361 – 2542679	The Executive Engineer (C) Postal Civil Division, Admin Building, Khanpur, Ahmedabad-380001 079- 25504055	The Executive Engineer (E) Postal Electrical Division CSO, Gandhi Nagar, Jaipur- 302015 0141 – 2708841

**UNDERTAKING - 1**

To be submitted by bidders (on company letter head duly signed with stamp & seal) online in pdf format on or before on 20.05.2026 upto 15.00 hrs.

Date:

To

**Executive Engineer(E )  
Postal Electrical Division  
Bengaluru**

Subject: Acceptance of Terms & Conditions of Tender and undertaking in case i/we becomes lowest bidder.

NIT No: 07/EEE/PED/BGL/2026-27

**Name of work : SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor Daksadan Hyderabad**

Dear Sir,

1. I/We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site namely: <https://eprocure.gov.in/eprocure/app> as per your advertisement, given in the above mentioned website.
2. I/We hereby certify that I / we have read the entire terms and conditions of the tender document from Page No. 1 to 48 (including all documents like annexures, schedules, etc.), which form part of the contract agreement and I/we shall abide hereby by the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this bid.
4. I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. I/We hereby undertake that the certified copy of all the scanned and uploaded documents as specified in notice inviting tender shall be deposited by me/us in the office of Executive Engineer(E), Postal Electrical Division, Bengaluru in case I/we become the lowest bidder within seven days of the opening of financial bid otherwise department may reject the bid and also take action to debar me/us from tendering in Department of Posts.
6. In case any provisions of this tender are found violated, then your department/ organisation shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

**UNDERTAKING - 2**

**To be submitted by bidders (on company letter head duly signed with stamp & seal) online in pdf format on or before on 20.05.2026 upto 15.00 hrs. (If the bidder has not obtained GST registration in the state in which work is to be taken up, or as required by GST authorities, then in such as case the bidder shall scan and upload following undertaking along with other bid documents)**

To  
Executive Engineer(E)  
Postal Electrical Division  
Bangalore

Date:

NIT No: 07/EEE/PED/BGL/2026-27

Name of work : SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor Daksadan Hyderabad

Dear Sir,

If work is awarded to me, I/we shall obtain GST registration Certificate of the State, in which work is to be taken up, within one month from the date of receipt of award letter or before release of any payment by the Department, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by the department or GST department in this regard.

Yours Faithfully

(Signature of the Bidder with official Seal)

**AFFIDAVIT**

**{Notarized affidavit shall be made on non-judicial stamp paper of value not less than Rs.10/-}**

**(Scanned copy to be submitted by bidder at the time of submission of bid).**

I, .....(Name), Son/Daughter/wife of ..... aged about..... years, resident of ..... (Full Address) by Occupation- Contractor, by Nationality- Indian, do hereby solemnly affirm on oath and declare as under:

NIT No: 07/EEE/PED/BGL/2026-27

**Name of work : SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor Daksadan Hyderabad**

Dear Sir,

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 from bidding in DOP-Civil Wing(Electrical) 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.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

**INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR E-TENDERING**

**DEPARTMENT OF POSTS**

Office of the Executive Engineer(E)

Postal Electrical Division

Basavanagudi, Bengaluru - 04

[Email ID-eeepdbgl@gmail.com](mailto:eeepdbgl@gmail.com)

**NOTICE INVITING TENDER**

No: 23(1)/EEE/PED/BGL/2026-27/148

Dated : 13.05.2026

The Executive Engineer (E), Postal Electrical Division, Bengaluru - 560 004 invites on behalf of the President of India, percentage rate tenders from approved and eligible contractors who fulfils the following eligibility conditions:

NIT No	<b>07/EEE/PED/BGL/2026-27</b>
Name of Work	<b>SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor Daksadan Hyderabad</b>
Estimated Cost (₹)	<b>909541</b>
EMD (₹)	<b>18191</b>
Time for completion of work	<b>30 days</b>
Last Date & Time of Submission of Technical and Financial Bid	<b>20.05.2026 upto 15.00 hrs.</b>
Date & Time of Opening of Technical Bid	<b>21.05.2026 upto 15.30 hrs.</b>
Validity of the Tender	<b>75 (Seventy five) days from the last day of receipt of technical bid</b>

**ELIGIBILITY CONDITIONS:**

- 1 The OEMs(Original Equipment Manufacturers) or the Firms/Integrators authorized by the OEMs (authorization certificate required from OEM) of VRV/VRF type AC system fulfilling the following conditions are eligible to apply. Joint Venture will not be accepted:

**(i) Financial**

Average annual financial turnover of at least 50 % of the estimated cost during the immediate last 3 consecutive financial years.

**(ii) Physical**

The firm should have satisfactorily completed the similar works in Central Govt./ State Govt./ Public Sector Undertakings, during the last 7 years ending last day of the month previous to the one in which tenders are invited as follows-

Three similar works each of value not less than 40% of the estimated cost put to tender

OR

Two similar works each of value not less than 60% of the estimated cost put to tender

OR

One similar work of value not less than 80% of the estimated cost put to tender

**Similar work shall mean "SITC of Cassette type AC system"**

**iii) The value of all above executed works 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 previous day of last date of submission of tenders.**

**(iv) The firm will have to furnish completion certificates of similar works of requisite magnitude issued by the officer of the client department of the rank of Executive Engineer or equivalent along with the application. The certificate shall clearly mention about the compensation is levied or not in case of completion of works after the due date. The works in which compensation is levied will not be treated as satisfactory completion.**

**Note for contractors : The payment for the work will be made based on the progress of work and subject to the availability of funds (i.e., depending on the allotment of funds from Competent authority from time to time). The contractor should not delay the work on the basis of fund status.**

- 2 The intending bidder should have valid GST registration/ Certificate of provisional registration for GST and copy of same is to be uploaded.

**NOTE:-**

- 1 The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- 2 Information and Instructions for bidders posted on website shall form part of bid document.
- 3 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 <https://eprocure.gov.in/eprocure/app> free of cost.
- 4 **Online bid documents submitted by intending bidders shall be opened only of those bidders, who has paid Earnest Money Deposit in online mode/uploaded scanned copy of EMD deposited and uploaded scanned copy of receipt of EMD deposited in this division or any other Electrical/civil division office of DOP for offline payment mode and other documents scanned and uploaded are found in order.**
- 5 Those contractors not registered on the website mentioned above, are required to get registered beforehand.
- 6 The intending bidder must have valid digital signature of Class II or Class III Certificates with signing key usage to submit the bid.
- 7 The e-Tenders invited under two envelopes system, the first electronic envelope will be named as Technical Envelope & will contain documents of bidder's satisfying the eligibility conditions and 2nd electronic envelope will be named as Financial Envelope containing tender document and Schedule/Bill of Quantities (BoQ). The bidder shall submit TECHNICAL BID ENVELOPE & FINANCIAL BID ENVELOPE simultaneously. The technical bids will be evaluated first and thereafter financial bids of eligible bidders only shall be opened. These envelopes shall contain one set of the following documents:-
  - a) TECHNICAL BID ENVELOPE shall contain the following documents: (Scanned copy of notarised English version should also be uploaded for documents in regional language)
  - i) Scanned copy of Treasury Challan/Demand Draft/Pay order or Banker's Cheque /Deposit at Call Receipt/FDR/Bank Guarantee of any Scheduled Bank along with deposition of EMD receipt in this division office or in any other Electrical/Civil Division of DOP / Receipt of Unique Transaction Reference (UTR) number of deposition of EMD to the account of AO, PED, Bengaluru through NEFT/RTGS/ through Internet Banking/Debit card/credit card/receipt of Cash in pdf format.

- ii) Scanned copy of Chartered Accountant's Certificate for turnover.
- iii) Scanned copy of authorization certificate as mentioned in para 1 of eligibility conditions above in pdf format. (applicable only in case of the firms/ integrators)
- iv) Scanned copy of PAN card.
- v) Scanned copy of UNDERTAKING (as per page 6 of this document) Stamped and Signed in pdf format
- vi) Scanned copies of Certificate of Registration of GST/Certificate of provisional registration in pdf format.
- vii) GST undertaking if required as per Page 7 of this document.
- viii) Affidavit (on non-judicial stamp paper of value not less than Rs. 10/- and duly notarized) (as per page-8 of this document)
- ix) Scanned copies of Completion certificates as referred in 1(iv) of Eligibility Conditions.
- x) Scanned copy of valid electrical licence.

**b) FINANCIAL BID ENVELOPE shall contain**

- i) Tender Document in pdf format (TENDERXXXXX.pdf file) digitally signed.
- ii) Schedule/Bill of Quantities (BoQ) in xls format (**BoQ\_XXXXX.xls**) file duly filled & digitally signed without changing the name of file.

Executive Engineer (E)  
Postal Electrical Division  
Bengaluru

Copy to: 1. The CPMG, Telangana Circle, Hyderabad 2. The SE (E), PEC, Bangalore, 3. The Executive Engineer (E), PED, Bengaluru/ Kolkata with a request to put the NIT on notice board 4. The Assistant Engineer (E), PESD, Hyderabad/Bengaluru/Mysore/Trivandrum/ Chennai/Coimbatore with a request to put the NIT on Notice Board. 5. Tender Clerk/ cashier in Division office for information. 6. Notice Board 7. Work file 8. Draft NIT.

Executive Engineer (E)

**Government of India**  
**DEPARTMENT OF POSTS**  
**NOTICE INVITING TENDER (PWD 6)**  
**(e-tendering mode)**

Percentage rate tenders are invited on behalf of President of India from approved and eligible contractors for the work of **SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor Daksadan Hyderabad.**

1.1 The work is estimated to cost **Rs 909541/-**. 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 tenders. He will also nominate Division, which will deal with all matters relating to the invitation of tenders.

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

- 2 Agreement shall be drawn with the successful tenderer on prescribed form No.C.P.W.D.- 8 which is available as a Govt. of India Publication. Tenderer shall quote his rates as per various terms and conditions of the said work which will form part of the agreement.
- 3 The time allowed for carrying out the work will be **30 days** after award of work 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 tender documents."
- 4 The site for the work is available.
- 5 The bid documents 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 website <https://eprocure.gov.in/eprocure/app>.
- 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 bid 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 bid as notified.
- 8 Earnest Money of **Rs 18,191/-** in the following OFFLINE or ONLINE mode shall be paid and scanned copy as mentioned below shall be uploaded

#### OFFLINE Mode

Treasury Challan or Demand Draft or Pay order or Banker's Cheque or Deposit at Call Receipt or Fixed Deposit Receipt or Bank Guarantee (drawn in favour of AO, PED, Bengaluru) shall be scanned and uploaded to the e-Tendering website within the period of bid submission. The original EMD can also be deposited either in the office of Executive Engineer (E) inviting bids or division office of any Executive Engineer (E/C), Postal Electrical/Civil Division of DOP (as mentioned on page 6) within the period of bid submission. The EMD receiving Executive Engineer (including NIT issuing EE) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (As per the given proforma in page 5) uploaded by tender inviting EE in the NIT. The bidder shall upload the scanned copy of the above receipt to the e-tendering portal within the period of bid submission. The Earnest Money Deposit can be paid in cash in the office of Executive Engineer(E), Postal Electrical Division for amount less than Rs10000/-. The bidder shall scan and upload the cash receipt to the e-tender portal within the bid submission period.

A part of earnest money is acceptable in the form of bank guarantee also. In such case, minimum 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of Bank Guarantee of any scheduled bank having validity for six months or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

OR

#### ONLINE Mode

**Earnest Money can be deposited through NEFT/RTGS/ through Internet Banking/Debit card/Credit card in the account of Accounts Officer, Postal Electrical Division, Bengaluru having account no. State bank of India, Basavanagudi Branch, Bengaluru Account No.: 34281036261 IFSC code no SBIN0003357. The transaction details of remittance of Earnest money to A/c should be filled at appropriate place while submitting the online bids. The unique transaction reference (UTR) of online payment as above of NEFT/RTGS/ through Internet Banking/Debit card/Credit shall have to be uploaded by the bidder in the e-tendering portal by the prescribed date. The Executive Engineer concerned will get Earnest Money verified from the bank based on the unique transaction reference number against each NEFT/RTGS/ through Internet/Debit card/Credit Banking payment if it is paid directly to the account of AO, PED, Bengaluru before the tenders are opened.**

**Note:- i) Earnest money must be deposited through separate transaction**

**ii) The bidder will use one UTR for one work only. In case it is found that bidder has used one UTR number for different tenders, all the tenders submitted by him will be rejected and he shall be debarred from further tendering in the department in future.**

**iii) Online bid documents submitted by intending bidders shall be opened only of those bidders, whose original EMD is deposited along with receipt issued by any Electrical /Civil Division of DOP and other documents scanned and uploaded are found in order, otherwise the bid will be rejected in first cover itself.**

**iv) The bidder has to use fresh EMD instrument (offline or online modes) only for each tender.**

**v) Earnest money can be refunded - on submission of PG and requisition letter in case of successful bidders (L1). However in case of unsuccessful bidders with a requisition letter along with account details (cancelled cheque) may be submitted.**

**All the documents as specified in the notice inviting tender shall be scanned and uploaded to the e-Tendering website within the period of bid submission.**

**However, certified copy of all the scanned and uploaded documents as specified in notice inviting tender shall have to be submitted by the lowest bidder within a week of opening of financial bids, physically in the office of tender opening authority, otherwise department may reject the bid and also take action to debar me/us from tendering in Department of Posts."**

8.1 The e-Tenders shall be submitted under two envelopes system to the e-tendering website before **20.05.2026 up to 03.00 PM**, the first electronic envelope will be named as **Technical BID Envelope** & shall contain documents of bidder's satisfying the eligibility conditions and 2nd electronic envelope shall be named as **Financial BID Envelope** containing Schedule/Bill of Quantities (BoQ) and Tender document in pdf format digitally signed. These envelopes shall contain one set of the following documents:-

8.1.1 **TECHNICAL BID ENVELOPE shall contain the following documents: (Scanned copy of notarised English version should also be uploaded for documents in regional language)**

a. Scanned copy of Treasury Challan/Demand Draft/Pay order or Banker's Cheque /Deposit at Call Receipt/FDR/Bank Guarantee of any Scheduled Bank along with deposition of EMD receipt in this division office or in any other Electrical/Civil Division of DOP / Receipt of Unique Transaction Reference (UTR) number of deposition of EMD to the account of AO, PED, Bengaluru through NEFT/RTGS/ through Internet Banking/Debit card/credit card/receipt of Cash in pdf format.

b. Scanned copy of Chartered Accountant's Certificate for turnover.

c. Scanned copy of authorization certificate as mentioned in para 1 of eligibility conditions above in pdf format. (applicable only in case of the firms/ integrators)

d. Scanned copy of PAN card.

e. Scanned copy of UNDERTAKING (as per page 6 of this document) Stamped and Signed in pdf format

f. Scanned copies of Certificate of Registration of GST/Certificate of provisional registration in pdf format.

g. GST undertaking if required as per Page 7 of this document.

h. Affidavit (on non-judicial stamp paper of value not less than Rs. 10/- and duly notarized) (as per page-8 of this document)

i. Scanned copies of Completion certificates as referred in 1(iv) of Eligibility Conditions.

j. Scanned copy of valid electrical licence.

8.1.2 **FINANCIAL BID ENVELOPE shall contain**

a. Tender Document in pdf format (TENDERXXXXX.pdf file) digitally signed.

b. Schedule of Quantities (SoQ) in xls format (BoQ\_XXXXX.xls) file duly filled & digitally signed without changing the name of file.

8.2 The online bids shall be submitted up to **20.05.2026 up to 03.00 PM**. Online Technical bid envelope will be opened by Executive Engineer (E), Postal Electrical Division, Bengaluru-560 004. or his authorized representative in his office on **21.05.2026 after 03.30PM**. The technical bids will be evaluated first and thereafter financial bids of eligible bidders only shall be opened.

## **9 The bid submitted shall become invalid if:**

9.1 The bidder is found ineligible.

9.2 The bidder does not upload all the eligibility documents as stipulated in the bid document (as per para 8.1.1 and 8.1.2 above) including the NIT documents, tender documents and Schedule of Quantities / Works including the Undertaking .

9.3 If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.

9.4 If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

- 10 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 cash (in case guarantee amount is less than `10000/-) or Treasury Challan or Demand Draft or Pay order or Banker's Cheque or Deposit at Call Receipt or Fixed Deposit Receipt or Bank Guarantee drawn in favour of AO, PED, Bengaluru. The performance guarantee is to be submitted by the bidder to Executive Engineer(E), Postal Electrical Division, Bengaluru within the period specified in Schedule-F. 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. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.
- 11 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 sub-soil (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 bidders 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 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 bidders 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.
- 12 The competent authority on behalf of the President of India 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 assigning 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 bidders shall be summarily rejected.
- 13 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.
- 14 The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- 15 The contractor shall not be permitted to bid for works in the Postal Electrical Circle, Bengaluru responsible for award and execution of contracts, in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Junior Engineer and Superintending 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 Department of Posts. Any breach of this condition by the contractor would render him liable to be debarred from tendering in this Department.
- 16 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 is 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.

- 17 The bid for the works shall remain open for acceptance for a period of **75 days** from the last date of receipt of technical 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 Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.
- 18 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 7 days from the stipulated date of start of the work, sign the contract consisting of:-
  - 18.1 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 (in BoQ\_XXXXX.xls file) at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
  - 18.2 Standard C.P.W.D. Form 7/8 or other Standard C.P.W.D. Form as applicable.
  - 18.3 CPWD General Conditions of Contract 2023 (GCC2023)
- 19 In case any discrepancy is noticed between the document as uploaded at the time of submission of the bid online and hard copies as submitted physically in the office of Executive Engineer, then the bid submitted shall be come invalid and the Government 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 retendering process of the work.
- 20 In case of any discrepancy in the tender document, the order of preference shall be 1) SOQ 2) Product Directory 3) Specifications.

For & on behalf of the President of India

Executive Engineer(E)  
Postal Electrical Division  
Bengaluru

## **IMPORTANT NOTE FOR CONTRACTORS**

### **1 INSPECTION OF SITE AND CONTRACT DOCUMENTS**

For purpose of inspection of site and relevant contract documents the firm is required to contact the **Assistant Engineer (E), Postal Electrical Sub Division, Hyderabad, Contact No.8249162225** who shall give reasonable facilities for inspection of the same. The firm shall inspect and examine the site and shall satisfy himself before submission of the tender as to the form and nature of the work, their quantities materials necessary for completion of the work and in general shall himself obtain all necessary information as to risk contingencies and other circumstances which may influence or affect his tender. No extra charges consequent on any misunderstanding or otherwise shall be paid.

### **2 SUFFICIENCY OF TENDER**

The firm shall be deemed to have satisfied himself before entering into the contract as to the correctness and sufficiency of his offer for the work and of the rates quoted in the schedule of works. These rates and amount shall, except as otherwise provided cover all his expenditure under the contract and all matters and things and co-ordination among DOP/EB/Statutory Inspection Authorities necessary for proper completion and maintenance and guarantee of the work.

### **3 TAX AND DUTIES:**

3.1 All statutory deductions etc shall be made at source as per the prevalent laws.

3.2 The rates quoted by the tenderer, shall be firm and inclusive of all taxes, duties, levies, octroi etc and all charges for packing, forwarding, insurance, freight and delivery, installation, testing, commissioning and clearance from Statutory Inspection Authorities etc inclusive of GST. Tax deduction at source (TDS) of all the applicable Taxes/duties shall be carried out at source as per the Government rules.

3.3 No concession forms will be issued by the Department.

4 The department reserves the right to accept the quantities in full or in parts or delete any item.

### **5 STANDING ORDER No.286**

5.1 Tender rates are inclusive of all taxes and levies including GST. However pursuant to the constitution (Forty Six Amendment) Act 1982, if any further tax or levy is imposed by a state, after the date of receipt of a tender and the contractor thereupon necessarily and properly pays such taxes/ levies, the contractor shall be reimbursed that amount to be paid provided such payment if any is not in the opinion of Superintending Engineer (E) (whose decision will be said binding) attributable to delay in execution of work within the control of the contractor.

5.2 The Contractor shall keep necessary books of accounts and other documents for the purpose of his condition as may be necessary of Government and further shall furnish such other information as the Engineer-in-charge may require.

5.3 The Contractor shall within 30 days of imposition of any further tax or variation in tax or levy pursuant to the Constitution (46th amendment) Act 1982 gives written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition together with all necessary information relating thereto.

5.4 Clause 10CC is not applicable to this tender.

### **6 SECURITY DEPOSIT**

The person/ persons whose tender(s) may be accepted (hereinafter called the contractor(s)) shall permit Govt. at the time of making any payment to him for work done under the contract to deduct a sum at the rate of **2.5%** of the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will equal the amount of security deposit i.e. **2.5%** of the tendered value of the work. Earnest money shall be adjusted first in the security deposit and further recovery of security deposit shall commence only when the up to date amount of security deposit starts exceeding the earnest money.

7 **PERFORMANCE GUARANTEE**

The successful tenderer shall submit an irrevocable performance guarantee of 5% of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement within 7 days of issue of letter of acceptance. This guarantee shall be in the form of government securities or fixed deposit receipts or guarantee bonds of any scheduled bank or the State Bank of India in the specified format. The performance guarantee shall be valid upto the stipulated date of completion plus six months beyond that.

8 **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 & Regulations for any accident occurring due to any cause and the department shall not be responsible for any accident and damage incurred or claims arising there from during the period of Erection, construction & putting into operation the equipments and ancillary equipment under the supervision of the successful tenderer 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 due to the above.

9 **ERECTION TOOLS**

No tools and tackles either for unloading or for shifting the equipment for erection purpose would be made available by the Department. The contractor shall make his own arrangement for all the facilities.

10 **CO-OPERATION WITH OTHER AGENCIES**

At the site of work more than one agency may be working. Full co-operation shall be extended to other agencies during progress of work. The work will be carried out in such a way so that it may not cause abnormal noise and hindrance to the offices of the DOP.

11 **STORES AND SAFETY**

All the stores and materials required for the satisfactory completion of the work shall be arranged at site by the contractor from his own sources. Lockable space, if available, for storing the material may be provided on request. However, safe custody of the material stored at site will be responsibility of the contractor.

12 **COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS.**

All works shall be carried out in accordance with relevant regulations 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.

- a). Factories Act.
- b). Indian Electricity Rules/ Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulation 2010
- c). IS &BS Standards as applicable.
- d). Workmen's compensation Act.
- e). Statutory norms prescribed by local bodies like CEA, ISEB etc.,

13 Nothing in this specification shall be construed to relieve the successful tenderer 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.

14 Successful tenderer shall arrange for compliance with statutory provisions of safety regulations and departmental requirement of safety codes in respect of labour employed on the work by the tenderer, Failure to provide and safety requirement will be at liberty of the department to make arrangement for the safety requirements at the cost of tenderer and recover the cost thereof from him.

15 **COMPLETION OF TENDER**

All sundry equipment, fittings 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 specifically mentioned in the tender documents or not.

16 **CARE OF THE BUILDING**

Care shall be taken by the contractor while handling and installing the various equipments 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 materials arising out of the installation from the site of work.

17 No mobilization amount/ incentive for early completion shall be paid for this work.

Executive Engineer(E)  
Postal Electrical Division  
Bengaluru

**PRODUCT DIRECTORY**

Sl. No	Item	Make
1	PVC insulated copper / aluminium conductor cable/wire	Polycab/RPG/Anchor/CCI/Finolex/L&T/Vishal/National/Standard/Sunlight/HPL/Pressfit/Walna/KEI/Svarn/GM/Gloster/Havells/MESCAB/GOLDMEDAL
2	Cable Glands	Comet/Braco/Dowells
3	Cable Jointing kit	Raychem/M-seal/Densons
4	PVC conduits/Casing & Capping and accessories	Diamond/Precision/Mercury/Avonplast/Clipsol/AKG/Pressfit/Asian/Sudhakar/Sanco/Universal/GM/KONSTRUCT
5	Steel conduits and accessories	ISI mark
6	Piano Switches and sockets	Anchor/Kinjal/Precision/Leader/Kalki/Pressfit/GM/LISHA
7	Ceiling rose	Antex/Emperor/Anchor/Leader/Kalki/Pressfit
8	MCB/ISOLATOR/ELCB & MCB DB	Legrand/L&T/Siemens/Indo-Asian/Havells/Standard/Anchor/Schnieder/HPL/Pressfit/GM/GOLDMEDAL
9	TP&N SFU withHRC/Rewirable fuse	L&T/Siemens/GE/ABB/Standard/Havells/HH Elecon/HPL/Anchor/Indo-Asian
10	Change over Switch	Havells/Standard/Indo-Asian/L&T/HPL/Anchor/Indo-Asian
11	ACB	L&T/Siemens/Crompton/Control & Switchgear/GE Power control/Indo-Asian/Havells
12	MCCB	L&T/Siemens/Crompton/Control & Switchgear/GE Power control/HPL/Indo-Asian/Havells
13	Contactors Auxiliary	L&T/Siemens/Crompton/Control & Switchgear/GE Power control/MEI/Laxmi
14	Voltmeter/Ammeter	AE/IMP/Universal/Reshab/Kayvee/MECO/Enercom
15	Current Transformer	AE/IMP/Marshall/Pactil/Kappa/L&T/Ashmor/Indiacoil/MECO /Waco
16	Single phasing preventer	L&T/Minilac/Zerotrip/Siemens
17	Timer	L&T/Minilac/Telemecanique/Siemens/AE
18	Indicating lamp	Vaishno/Siemens/L&T/Universal Electric/Usha/ Asian/ AE/ IMP
19	Selector Switch	L&T/Kaycee/AE/IMP/Thakoor/Reco/Vaishno/Seizer/ Rass control
20	Capacitor	Khatau/Junkar/Crompton/L&T/Universal Electric/Usha /Asian/AE/IMP
21	GI/MS pipe	BST/ATL/ITC/Jindal/TATA/Zenith/GST/ATC/IIA/JST/ITS/ TTS
22	Monoblock Pump	Beacon/Batlilboi/Kirloskar/Jyoti/Mather & Platt/KSB/Crompton/Wasp/BE/PEC/Waterman/CRI
23	Submesible Pump	Kirloskar/KSB/Calama/Amut/BE/PEC/Waterman/CRI
24	Starter	L&T/Siemens/BCH/ABB/MEI/GE Power Controls
25	GM Valves	Trishul/Leader/Kirloskar/Fountain/Snt/Zoloto
26	Bulk Head fittings	Philips/Crompton/Havells/Bajaj/Jaquar/Luker
27	Fire Extinguisher	ISI mark
28	LED fitting	Philips/Crompton/Bajaj/Wipro/Havells/JAQUAR/Luker/GM/Panasonic/Surya/GOLDMEDAL/Other as approved by Engineer-in-charge
29	Ceiling Fan (BLDC)	USHA/Khaitan/Orient/Havells/Atomberg/CG/Bajaj/Luker/GOLDMEDAL/Other as approved by Engineer-in-charge
30	Rubber Matting	ISI mark
31	Modular switches	Anchor Roma/MDS/Havells/MK/Crabtree/Legrand/Indo Asian/LISHA/GOLDMEDAL
32	VRV/VRF A/C UNIT	VOLTAS/HITACHI/DAIKIN/ O-GENERAL/MITSUBISHI ELECTRIC/BLUE STAR / TOSHIBA
33	Air Conditioner	Haier/Voltas/Blue Star/ Daikin/Hitachi/O-General/Mitsubishi Electric
34	Network Switch	Cisco/TPlink/ Juniper/D-link/Molex/Tyco/Belkin
35	Camera	Hikvision/Bosch/Honeywell
36	Hard Disk	Toshiba/WD/Seagate
37	LED TV	SONY/LG/SAMSUNG
38	Monitor	DELL / SAMSUNG / HP / ACER
39	UPS	Numeric /APC/Tritronics/ Emerson/GE/Mitsubishi/Chloride/Siemens
40	Batteries	Exide/Quanta/Amaron
41	Fire alarm Control panel	Honeywell / Notifier / Agni / Siemens (UL/EL) approved
42	DETECTORS & OTHER MODULES	Honeywel/ Siemens / Notifier

**LIST OF ACCEPTABLE MAKES AUDIO VIDEO SYSTEM**

<b>Sl. No</b>	<b>Item</b>	<b>Make</b>
1	Chairman MIC, Delegate MIC, Controller	Audio technica/ shure/ Telvic/ Sennheiser
2	Wireless Gooseneck MIC	Audio technica/ shure/ Telvic/ Sennheiser
3	Wireless Handheld Transmitter	Audio technica/ shure/ Telvic/ Sennheiser
4	Wireless Lapel Transmitter	Audio technica/ shure/ Telvic/ Sennheiser
5	Wireless Receiver	Audio technica/ shure/ Telvic/ Sennheiser
6	Digital Signal Processor	Bose /QSC /Symetrix make
7	Power Amplifier	Powersoft/ Labgruppen / Bose/ EAW
8	Analog Mixer	Yamaha/ Soundcraft/ Behringer
9	HDMI switcher, Distribution amplifier	Kramer / Liberty AV /Extron
10	Wall Mount / Ceiling Speaker	Meyer sound/ Labgruppen / Bose/ EAW
11	Interactive Display	Benq/ Delta/Sony/ Samsung/ LG
12	Speaker, MIC Cable	Crystal/ liberty AV/ kramer/ estron
13	Equipment Rack	Valrack/ Dlink/ president
14	Lan Cable	Legrand/ Dlink/ Aten/ Intellinet
15	HDMI/ USB Cable	Kramer/Aten/ Liberty AV/ Estron/Manhattan
16	PVC Trunking	MK / Schneider Electric / Legrand / AKG
17	ANY OTHER MATERIAL	With prior approval of Engineer-in-charge.

**Executive Engineer(E)**

### **Correction slips**

#### CPWD FORM 6:

1. Wherever Form -7/8 is appearing in this form, figure 8 stands deleted.
2. Wherever item rate tender is appearing in this form, it stands deleted.
3. Para 1 of this form is substituted as Press Notification enclosed in the tender documents.

#### CPWD FORM 7/8:

1. Wherever Form -7/8 is appearing in this form, figure 8 stands deleted.
2. Wherever item rate tender is appearing in this form, it stands deleted.
3. All the Para's in this form related to Form CPWD-8 (for item rate tender) may be treated as deleted.
4. Clause 2A of this form related to incentives for early completion may be treated as deleted.

## **General Description of Work**

**1.0** The EI & fans work and electrical panel works shall comprise of items described in the schedule of work and specifications for various items of work detailed in the following sections.

### **2.0 General Specifications**

#### **A Specification for Electrical Installation work**

**a** The work shall be done as per CPWD General specifications for Electrical works, Part-I, Internal, 2013, CPWD General Specification for Electrical Works (Part-II-External) 1994 as amended up to date and Central Electricity Authority (Measures relating to safety and electric supply) Regulations 2010 as amended up to date.

**b** (b) The work shall be supervised by a qualified overseer/ Degree Holder Supervisor and the contractor will have to submit the Credentials of the overseer/ Degree Holder before he will be allowed to work at the site.

**c** Separate conduits shall be provided for followings:

**i.** Power plug wiring

**ii.** Light and fan point wiring

**d** The number of power plug points may not exceed one two circuit in any of the cases.

**e** The earthing sets (if required) shall be provided in the presence of the Engineer-in-charge or his authorized representative failing which the contractor will have to redo the earthing in the presence of the Engineer-in-charge or his authorized representatives.

**f** The contractor will have to give the following tests at his cost and intimate test results before final bills are paid. Nothing extra will be paid to him on this account. These test will be carried out in the presence of the Engineer-in-charge his authorized representatives.

(a)Earth test.

(b)Polarity test.

(c)Insulation test.

(d)Earth continuity test of the recessed conduit.

**g** Any damage done to the bldg. by the contractor during the execution of work shall have to be made good at his cost & risk. If he does not do it himself within a reasonable time as determined by the Engineer-in-charge the same will be got at his cost departmentally after giving notice to him.

**h** The runs of various circuit wiring at various places shall be kept minimum by taking the runs on walls.

**i** All the sub distribution boards sub main boards and main boards shall be sign written clearly indicating the number of distribution board, the types of load it is serving and the number of circuits contained in the distribution box. Details of the routes fed from a

**j** The contractor will have to use metal clad switches and metal clad distribution boxes of specified categories as given in the schedule of work.

**k** Interconnection between bus bar and switches (100 Amps and above) on sub main boards will be done with solid copper conductor with PVC sheathing.

**l** While making the end connections of wire, no strand shall be out and the termination of wire shall be done with necessary lugs and ferrules without any extra payment.

- m** Lugs should be provided while terminating 6/8 SWG G.I. wire for earth continuity without any extra payment.
- n** The termination of conduits etc. in the junction box to be provided above DB's should be done by making proper holes instead of cutting the box.
- o** If any conduit is laid before the award of this work the recovery for the same will be made from the contractor at schedule rates plus abatement of this tender.
- p** The bus bar provided in main board shall be suitable for current density of not more than 100 Amp/sq.cm.
- q** Air conditioning plant rooms, weather maker rooms, sub station rooms and engine alternator rooms shall be provided with lights only on walls.
- r** Three pin ceiling rose outlets shall be provided on walls in substation rooms at 2300mm from floor level for installation of wall mounting fans / air circulators.
- s** Conduits leading from switch boards to SDBs shall preferable be clubbed in junction boxes to be provided below the beams and reduced number of higher sizes conduits may be taken down to SDBs for termination of circuits & sub mains.

**B** **Specification for LT panel**

The work shall be done as per CPWD General Specifications for Electrical Works Part-IV Substations 2013 as amended up to date and Central Electricity Authority (Measures relating to safety and electric supply) Regulations 2010 as amended up to date.

**1 LT . PANELS & SWITCHGEAR**

Cubicle type switch boards and components shall be fabricated and installed as per CPWD Specifications for Electrical Works Part-IV Substations 2013

**1.1 LT PANEL BOARD:**

The relevant IS shall be followed for all the equipments.

**1.2 ENCLOSURE PROTECTION:**

IP-42 as per IS-13947- Part-I as amended up to date for indoor applications and IP-55 for out door applications.

**1.3 CONSTRUCTION**

The switchboards like main L.T.panels, capacitor panels shall be cubicle type factory assembled fabricated from CRCA sheet steel framework, 2 mm thick including covers. The cleaning and painting shall be done in 7 tank process with final finishing in required shade of powder coating. The bus bars shall be copper strips of suitable size and rating mounted on SMC/DMC support at regular intervals required to suit fault rating as specified above including fasteners and hardware etc., MCCB module shall have minimum depth of 300 mm and shall be maintained throughout the length to keep a uniform depth.

The panels shall be complete with all internal wiring and bus bars connections of suitable rating. The panels shall be fabricated in transportable sections with lifting hooks on top and MS base channels of not less than 100x50mm x 5mm size and segregated multi-tier formation, floor mounting. An Aluminium earth bus of adequate capacity shall run all along the length and breadth at bottom of the panel with proper supports.

The switch board shall be suitable for climate conditions as called for. The design shall include all provision for safety of operating & maintenance personnel. Overall height of the panel shall not exceed 2.2 m with maximum operating lever at 1.8 m. Cable entries shall be from the sides of the panel for main panel and shall be made through gland plates. Cable supports shall be provided in cable alleys.

**General arrangement of the panel shall be got approved before final fabrication is taken up.**

#### 1.4 BUS BARS CONNECTION

The Bus bars connections shall be high conductivity aluminium alloy of electrolytic quality and of adequate section as per fault levels and current ratings of the panel. The bus bar provided in main board shall be suitable for current density of 100Amp/sq.mm. The system may comprise of main horizontal bus-bars and auxiliary vertical bus bars as per requirement of the panel. All connections to individual feeders shall be with solid connections. Bus Bars/Connections shall be suitably sleeved by Heat Shrinkable Coloured Sleeves. Fault withstands capacity for bus bars – 50 KA for 1 second

#### 1.5 INCOMER TERMINATIONS

Incomer MCCB/SDF/Change over shall be suitable to receive high conductivity tinned copper of electrolytic quality bus bar.

#### 1.6 OUTGOING TERMINATIONS

The outgoing terminals shall be brought out into the cable alley with solid conductors of appropriate size for easy termination of the cables.

#### 1.7 Instruments & Indicating Lamps

The indicating instruments shall be LED/Digital type of class 1.5 as per IS:1248 as amended upto date. All meters shall be provided with HRC type cartridge fuses.

The indicating lights shall be provided as called for in schedule of quantities. All lights shall be provided with HRC type cartridge fuses. The coloured filters shall be used as per norms. All phase indicating lights shall be provided with ON/OFF toggle switches.

#### 1.8 Tests

All tests shall be carried out as per relevant Indian Standards & CPWD Specifications. Contractors shall have to furnish test reports of all 'Tests'.

#### 1.9 HEAVY DUTY COMPOSITE UNITS OF SWITCHES & FUSES

All switches shall be suitable for operation from the front and shall be as IS 13947-1997. The ranging of switch fuses shall be as specified. Outgoing feeders shall be neatly arranged in different compartments. Normally switches for individual feeders shall be accommodated in separate modules.

#### 1.10 CABLE COMPARTMENTS

A full height compartment running behind the vertical modules shall be provided for easy termination of all incoming and outgoing cables entering from top or from bottom. Adequate supports shall be provided for the cables wherever necessary. The cable compartment shall have its own hinged cover which can be removed for easy access during cabling.

#### 1.11 INTERCONNECTIONS AND CONTROL WIRING.

Switch board shall be completely factory wired ready for connecting to the equipment. Power connection of the circuit shall be done by Aluminium flats or by adequate size of PVC insulated stranded copper wires. Control wiring shall be done by PVC insulated wires of minimum size 1.5sqmm copper. All control wiring shall be fitted with identification ferule at each end and not more than two connections shall be made at any one terminal. The wires shall be arranged and supported in such a manner that there shall be no strain on the terminations.

#### 1.12 TERMINAL ARRANGEMENT :

The terminals shall be adequate current rating and size to suit individual feeder requirements. Cable lugs used for terminations shall be mounted in such a manner so as to facilitate easy cable connections. Terminals shall be mounted in cable compartment. Tap-off connections at the busbars shall be made with nuts, bolts and washers. Busbars shall not be threaded for terminating wire connections.

#### 1.13 CABLE ENTRY

The switch board shall be designed to facilitate Copper/Aluminium conductor PVC cable entry from top or bottom as the case may be. Removable sheet steel plate provided with suitable size of cable glands as specified shall be fitted at the top or bottom.

#### 1.14 EARTHING BUSBARS.

The earth bus bar shall be Aluminum/copper and of appropriate size.

#### 1.15 ACB

All Air Circuit Breakers shall be of 3/4 Pole with minimum 50 KA breaking capacity ( 35 MVA at 433 V) as per schedule & Conforming to IS 13947 ( Part II) Rated current shall be as per the capacities and as per the schedule

**1.16 PAINTING.**

All sheet metal work shall undergo seven tank process such as degreasing, pickling in the acid, cold rinsing, phosphating, passivating etc and then be sprayed with high corrosion resistant primer. The primer shall be baked in an oven. The finishing treatment shall be by application of two coats of synthetic paint of approved shade of supply.

**2 GENERAL:**

1. The Panel board shall be complete with necessary interconnections, cable sockets, circuit labels, control wiring colour and number coding ferrules. The panel shall be powder coated, duly painted with approved colour(Seimens gret matte finish).

2. The meters, indicating lamps shall have necessary protective fuses.

3. Suitable size of earth bus bar to be provided running along the length of the switch board with earth terminals.

4. The design, manufacture and testing of various equipments covered by the latest issue of IS specifications.

5. Guarantee: The panel components shall be guaranteed against material and/or manufacturing defects and for its perfect functioning for a period of eighteen months from the date of supply or one year from the date of commissioning of the equipments whichever is earlier.

6. Drawings of Panel may be got approved from Engineer-in-charge before fabrication.

7. The panels shall be got inspected by the Engineer-in-charge before 7 tank process and before dispatch from the manufacturer's workshop.

**3 Cable work**

Cables shall be laid in accordance with the CPWD General specification for Electrical works –Part-II ( External) 1994 amended up to date.

**4 Earthing**

The Earthing shall be done as per the as per Section 7 of CPWD specification for Electrical works Part-IV( Sub stations)

**5 MCCB**

The incoming MCCB should be provided with earth fault release.

**Executive Engineer(E)**

### ADDITIONAL SPECIFICATIONS

1. The work is to be carried out in workman liked manner and generally in accordance with the plans, however the contractor will be bound to carry out the work with minor deviations over the plan supplied if desired by the Engineer-in-charge of the work.
2. The Contractor has to make his own arrangement for the storage of the materials and necessary watch and ward of the electrical installation during the execution of the work till the same is handed over to the department, No extra payment will be made on this account.
3. All chases, holes, recesses etc shall be done to the original finish by the contractor as required without any additional work. The work shall be carried out in close coordination with civil work.
4. All the damages to the building made by the contractor shall have to be good to its original finish as per requirement within the tendered amount.
5. All the boxes for fixing accessories such as switches/sockets regular etc will be good quality and will be got approved from the Engineer in charge of the work before using.
6. Contractor should inspect the site before quoting the rate and no claim whatsoever shall be entertained later on this account.
7. After completion of work the contractor shall remove all the dust and dirt and keep the building in a clean condition.
8. The department material if any will be issued to the contractor free of cost. Unused material should be returned to the department otherwise recovery will be made at the twice the issue rate of the firm from the bills of the contractor. Transportation of the materials from store to work site shall be borne by the contractor and no extra payment will be made on this account.
9. All the wires above 1.5 sq.mm must be terminated to the switchboard MCB's through suitable lugs by crimping for which no extra payment will be made and for wire has to be provided in conduit where wire is not drawn.
10. Proper sleeving should be provided to be bare earth conductor in the switch boxes and also to the bare conductor used for inter-switch looping inside the switchboxes for which no extra payment will be made.
11. Unless or otherwise specified only grey coloured FRLS PVC conduit (ISI marked with Embossing) shall be used.
12. The wires & cables used for this work shall be ISI marked of make mentioned in the approved product directory of this NIT. The Agency has to submit copy of valid test report/certificate for the same from the manufacturer. Wires & cables having no BIS license or expired BIS license shall not be accepted.
13. The complete work or its part shall not be sublet to other contractor.
14. The SPMCB should be of 10 KA breaking capacity.

**Executive Engineer(E)**

## TECHNICAL SPECIFICATIONS FOR CASSETTE AC SYSTEM

### 1.0 SCOPE

The scope of this Section comprises the supplying, installation, testing and commissioning of the air-conditioning system conforming to the specifications and in accordance with the requirements given in Schedule of Equipments.

#### **VARIABLE REFRIGERANT FLOW SYSTEM:**

The system shall be air-cooled, direct expansion type central air conditioning system consisting of one or more Variable Refrigerant Flow Condensing unit (Outdoor Unit) and connected to it one or more Evaporator (Indoor Units) for cooling and heating operation. Each having the capability of individual set point control & the condensing unit should incorporate multiple scroll compressors to obtain minimum 10% to 100% capacity control. Refrigerant used for system should be R410A.

#### **Condensing Unit (Outdoor Unit):**

The condensing unit shall be capable of assessing the requirement of liquid refrigerant flow of each evaporating unit at all times by means of a microcomputer control expansion valve and generating the required total flow of refrigerant liquid for supply to the evaporator units.

The condensing unit shall be modular type, manufactured / assembled in India, designed as per Indian atmospheric conditions and should be capable to perform for outside ambient 48 Deg. C. Outdoor Units should be modular in type and should be equipped with Inverter Scroll Compressor.

Each outdoor unit should have full Inverter with variable speed compressor and capable of changing the capacity in accordance to the cooling load requirement with highest COP/EER. Provision of setting External Static Pressure as specified by the manufacturer.

Unit COP/EER should be high and designed for cooling operation for highest ambient Temperature as per Indian atmospheric conditions. Set of Outdoor Unit should be able to connect as specified by the manufacturer.

Outdoor unit should consist of DC variable speed motor for condenser fan with minimum steps speed control as specified by the manufacturer to reduce input power auto check function for connection error, auto address setting. Unit should be equipped with a double stage highly efficient oil separation management system to ensure minimum oil entrenchment and proper lubrication with high reliability and stable operation with long refrigerant piping. The noise level of the base unit shall be less than as specified by the manufacturer. Unit should assess demand function automatically and perform with the help of Central Station. Units having Noise reduction mode will be preferred but must be having back up operation function for emergency to avoid complete stop. Outdoor unit should have feature of Rotation Operation function of Compressor to distribute load. The condenser coil should be with internally grooved Cu tubes, mechanically bonded to super slit aluminum fins. The surface of the condenser coil shall be coated with suitable chemical coating to prevent deterioration due to climate.

Outdoor unit must have automatic judgment function to check whether or not the refrigerant amount is sufficient in one refrigerant cycle. Reliable Transmission system should be used between outdoor and indoor units. All necessary safety devices shall be provided to ensure safe operation of the system.

**Indoor Units (Evaporating Units):**

Each unit shall be selected as per requirement of the cooling load and matching with interior layout in the respective space to be air-conditioned. The unit shall be equipped with suitable electronic expansion valve, which can communicate with the controller in the condensing unit. The fan shall be of the dual suction multi blade type and statically and dynamically balanced to ensure low noise and vibration free operation. More steps of fan speed will be preferable. Indoor units should have inbuilt drain pump. The Evaporator coil should be provided with Cu tubes, mechanically bonded to super slit aluminum fins.

Indoor units shall be equipped with cordless for setting the operating parameters.

The address of the indoor unit shall be set automatically in case of individual and group control and option of centralized control should also be achievable.

Controls shall be provided to maintain the set room temperature within close tolerance limits.

**Cassette Type**

Units must be compact with different speeds of fan with lowest sound level and highest CFM. Height of unit should be lowest & shall be suitable for housing in available false ceiling grid.

**In the Ceiling type (Low Height)**

Units must be minimum height with different speeds of fan and within built drain pump mechanism. Sound pressure level should as specified by the manufacturer.

**In the Ceiling type (High Static)**

Units must be compact type in dimension Sound pressure level should as specified by the manufacturer and CFM / HP as specified by the manufacturer to handle high CFM load.

Sound pressure level should as specified by the manufacturer

**In the Ceiling type (Low Static)**

Units must be compact type in dimension with Sound pressure level should as specified by the manufacturer with lowest sound level and maximum CFM. Sound pressure level should as specified by the manufacturer.

**Ceiling Type**

Units should be hanging type with different speeds of fan, low in height and sound, highest CFM and optional motion sensor. Both Indoor units & outdoor units shall be factory assembled, tested and filled with first charge of refrigerant before delivering at site.

**Refrigerant Circuit**

The refrigerant circuit shall include an accumulator, liquid and gas shut off valves and a solenoid valves or pulse width modulation valve.

All necessary safety devices shall be provided to ensure the safety operation of the system.

**Safety Devices**

The following safety devices shall be part of the outdoor unit; High Pressure Switch, Low Pressure Switch, Fan Motor Safety Thermostat, Inverter Overload Protector, Over Current Relay, Fusible Plugs, Fuses.

**Oil Recovery System**

Each unit shall be equipped, with **two** stages **ensure** stable operation with long refrigerant piping.

**Copper tubes used for Refrigerant Piping**

Seamless copper piping for Air conditioning and Refrigeration conforming to ASTM B280. IS 10773:1995 & IS 5493:1981

## **2.0 INSTALLATION:**

Compressor, condenser and Fans shall be enclosed in a powder coated housing. The Electrical wiring shall be passed through separate PVC conduit pipes as required. The contractor shall supply foundation bolts, nuts, washers, leveling screws, mounting frame base plate, vibration isolation pad etc. as required, and it shall be the responsibility of the contractor to see that all the above items are properly and securely placed in the position on the foundation. The Room units shall be suspended from ceiling with dash fasteners of good quality. Electronic Remote controls to be installed/located at the place desired.

The contractor shall supply the required quantum of refrigerant, lubricants and other consumables for testing and commissioning of the equipment.

The unit shall be properly leveled before grouting the foundation bolts.

All the equipment shall be thoroughly tested and checked for leaks. The refrigeration system shall be vacuumised to within 5 mm Hg. absolute and maintain for four hours. At the end of this period, the pumps shall be stopped and vacuum maintained for 24 hours without exceeding a vacuum drop of 1 mm Hg. absolute. The contractor shall certify that the vacuum was maintained as specified above.

All safety controls, low and high refrigerant pipe controls, LP-HP, internal OLP, single phase preventer & phase reversal, starter overload trips shall be provided & suitably set and a record of all these settings shall be furnished.

The units shall be mounted on ribbed rubber pads for vibration isolation. The contractor shall supply the required charge of refrigerant, lubricant and other consumables, for commissioning and testing of the equipment.

All the equipment shall be thoroughly tested and checked for leaks. All safety controls shall be suitably set and a record of all setting shall be furnished to the project supervisor.

## **3.0 PAINTING:**

All the equipment's, mounting frames, stands etc. shall be painted with 2 coats of suitable paints over the priming paint to prevent corrosion of the equipment.

Shop coats of paint that have become marred during transportation or erection shall be cleaned off with mineral spirits, wire brushed and spot primed over the affected areas, then coated with enamel paint to match the finish over the adjoining shop- painted surfaces.

## **4.0 TESTING:**

Unit capacity in tons Refrigeration shall be computed from the temperature readings and air-flow measurements. Flow measurements shall be preferably by a hot-wire anemometer or a velometer. Computed results shall conform to the specified capacities and the power consumption shall conform to the figures furnished by the manufacturer.

## **5.0 CONDENSATE DRAIN PIPING:**

All pipes to be used for cold water (makeup), drain, and condensate drain shall be PVC pipe conforming to IS: 4985 - Class I & all joints should be Gluing or solvent cementing as per manufacturer recommendation with 9mm thick Nitrile Rubber insulation with white painting over it as per roof colour.

## **6.0 REFRIGERANT PIPING:**

All refrigerant pipes and fittings shall be hard drawn copper tubes and wrought copper /brass fittings suitable for connection with silver solder / phos-copper.

All joints in copper piping shall be sweat joints using low temperature brazing and / or silver solder. Before joining any copper pipe or fittings, its interiors shall be thoroughly cleaned by passing a clean cloth via wire or cable through its entire length. The piping shall be continuously kept clean of dirt etc. while constructing the joints. Subsequently, it shall be thoroughly blown out using carbon dioxide / nitrogen.

Refrigerant lines shall be sized to limit pressure drop between the evaporator and condensing unit to less than 0.2 kg per sq.cm.

Sight glass with moisture indicator and removable type combination dryer cum filter with MS housing and brass wire mesh / punched brass sheet shall be installed in liquid line of the refrigeration system incorporating a three-valve by pass. The liquid line drier cartridges shall be replaced as per recommended by the Manufacturer.

Heat exchanger shall be of heavy duty copper and without any joint in the inner pipe.

Horizontal suction line shall be pitched towards the compressor and no reducers shall be provided for proper oil return.

After the refrigerant piping installation has been completed, the refrigerant piping system shall be pressure tested using Freon mixed with nitrogen / carbon dioxide at a pressure of 20 kg per sq. cm (high side) and 8 kg per sq. cm (low side). Pressure shall be maintained in the system for a minimum of 12 hours. The system shall then be evacuated to a minimum vacuum of 70 cm of mercury and held for 24 hours. Vacuum shall be checked with a vacuum gage.

All refrigeration piping shall be installed strictly as per the instructions and recommendations of air conditioning equipment manufacturer.

The refrigerant piping shall be insulated with 13mm thick Nitrile rubber insulation from 6.5mm to 22.2mm dia tubes and with 19mm thick insulation for tubes from dia 25.4mm to 41.3mm.

#### **7.0 TESTING & BALANCING:**

All piping shall be tested to hydrostatic test pressure of at least two and half times the maximum operating pressure, but not less than 24 hours. All leaks and defects in joints revealed during the testing shall be rectified and gotten approved at site.

Piping repaired subsequent to the above pressure test shall be retested in the same manner.

System may be tested in sections and such sections shall be securely capped, then retested for entire system.

The contractor shall give sufficient notice to all other agencies at site, of his intention to test a section or sections of piping and all testing shall be witnessed and recorded by Consultant/Project Manager.

**Executive Engineer(E)  
PED, Bengaluru**

## ADDITIONAL, COMMERCIAL & TECHNICAL CONDITIONS FOR AUDIO VIDEO SYSTEM

- 1 The successful tenderer shall submit, along with the performance guarantee after the acceptance of tender, an undertaking from the OEM regarding.
  - a) Authorization Certificates.
  - b) The OEM shall unconditionally support the lowest tenderer technically throughout the execution of contract as well as for Maintenance/ Comprehensive Maintenance Contract for the useful life of the system, and.
  - c) OEM provides all the spares required for healthy functioning of the equipment for at least five years from the date of completion of work.
  - d) Compliance of BOQ i/c specifications and terms & conditions of NIT.
  - e) OEM shall not be blacklisted at the time of submission of bid documents / debarred from the Department.
- 2 The successful tenderer would be required to submit the following drawings after award of work for approval before commencement of installation. Cost of these drawing deemed to be included in the rates and nothing extra shall be paid on this account.
  - a) All general arrangement drawings.
  - b) Details of the equipment's/ component hardware's, software's, single line diagram, installation drawings, weight details i/c mounting/hanging arrangement, electrical load requirements, copy of standards and compliance standards, data's of power and communication cables, location details etc. of various assembled equipment as may be needed for purpose of their work.
  - c) Complete layout dimensions with location of equipments for every unit/group of units with dimensions required for erection purposes.
  - d) Any other drawing/information not specifically/mentioned above but deemed to be necessary for the job by the contractor.
- 3 The successful tenderer should furnish well in advance three copies of detailed instructions and manuals of manufactures for all items of equipments regarding installation, adjustments, operation and maintenance including preventive maintenance and troubleshooting together with all the relevant data sheets, spare parts catalogue and workshop procedure for repairs, assembly and adjustment etc all in triplicate.
- 4 The contractor shall submit the relevant test certificate from OEM at the time of supply of equipment.
- 5 **DURING INSPECTION AND TESTING: -**

All major equipments shall be offered for initial inspection by the engineer or officer authorized by him at manufacturer's works in India. The department may or may not inspect the material at its discretion. The contractor will intimate the date of testing of equipments at the manufacturer's works before dispatch. Contractor shall make all arrangements for inspection of material at works.

The department reserves the right to get the equipment inspected by third party inspection also. Such inspection shall be of following categories:

  - a) Inspection of materials/ equipments to be witnessed at the manufacturer's premises/ at its authorized works in India, in accordance with relevant BIS/Agreement Inspection Procedure.
  - b) To receive material at site with manufacturer's Routine & Type Test certificates.
  - c) To inspect material at the authorized dealer's go-down to ensure delivery of genuine material.
  - d) To receive material after physical inspection at site.
- 6 Adequate care to ensure that only tested and genuine materials of proper quality are used in work shall be ensured by firm. The firm shall ensure that:
  - a) Material will be ordered and delivered at site only with the prior approval of the department. The contractor shall, however, be responsible for timely delivery of material.
  - b) As and when the order is placed for the items, it shall be endorsed to the engineer-in-charge alongwith details of Agency, model no. and other delivery details including bills and challans.
- 7 **SITE MAINTENANCE: -**

- a) The Contractor shall maintain the Sites in good order during the whole construction period. It is strictly prohibited to bury any kind of waste materials, solid or liquid, in the ground. In the event of accidental discharge of polluting materials, the Contractor shall take immediate mitigating action and shall immediately inform the Client and the appropriate authorities.
  - b) In the event of any such loss or damage happening from any of the excepted risks defined in GCC 2023 (Maintenance) pertaining to permanent works, as in combination with other risks, the contractor shall, if so required by the Engineer-in-charge, rectify the loss or damage. An addition to the contract price shall be determined treating the work done to rectify the loss or damage as variation/ extra/ substituted item, as given in the relevant clauses.
  - c) Whenever any event as mentioned above occurs, the contractor will notify the Engineer-in-charge, within 14 days and provide a forecast cost of repairs / rectifications of damages / losses. As soon as information demonstrating the effect of such event is available, the Engineer-in-charge shall assess the cost of repairs/ rectifications to be paid. In case contractor's forecast is deemed unreasonable, the Engineer-in-charge shall adjust the contract price and/ or extend the
  - d) During execution of work if any damage of false ceiling, paint, floors has arisen contractor has to repair the same without any extra payment from the department.
  - e) Failing which a recovery minimum 3% of tendered amount (nonrefundable) shall be made from the final bill.
- 8 Work is proposed to be carried out in functional building due to which labour wastage may be there, contractor shall not make any claim in this regard.
- 9 After completion of work, contractor shall arrange testing of system as per relevant act/rule/code without which work could not be treated as completed.
- 10 **TERMS OF PAYMENT: -**  
The following percentage of contract rates for the various items included in the contract shall be payable against the stage of work shown herein.
- a) 70% after delivery at site in good condition of pro-rata basis.
  - b) 20% after completion of installation in all respect.
  - c) Balance 10% will be paid after testing, commissioning, trial run & handing over for beneficial use.

## **SPECIAL CONDITIONS OF CONTRACT**

### **1. GENERAL :**

All special conditions shall be read in conjunction with the conditions of contract and amendments thereto. If there are provisions in these conditions which are at variance with provisions in the other documents, the provisions in these special conditions shall take precedence.

The work shall generally be carried out as per IE rules, IS and national building/ electrical codes / fire manuals / telecom & CPWD latest Substation specifications and NIT conditions.

### **2. INSPECTION OF SITE AND CONTRACT DOCUMENTS :**

For the purpose of inspection of site and relevant contract documents the firm is required to contact the Executive Engineer (E) concerned who shall give reasonable facilities for inspection of the same. The firm shall inspect and examine the site and shall satisfy himself before submission of the tender as to the form and nature of work, their quantities, materials necessary for completion of the work and in general shall himself obtain all necessary information as to risks contingencies and other circumstances which may influence or affect his tender. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

### **3. SUFFICIENCY OF TENDER :**

The firm shall be deemed to have satisfied himself before entering into the contract as to the correctness and sufficiency of his offer for the work and of the rates quoted in the schedule of works. These rates and amounts shall, except as otherwise provided cover all his obligations under the contract and all matters and things necessary for proper completion and maintenance and guarantee of the work.

### **4. STORES AND MATERIALS:**

All the stores and materials required for the work except those supplied as departmentally shall be arranged at works site by the firm, from his own resources or open market. It should be clearly understood that the Department on this account shall entertain no claim whatsoever. Safe custody of the materials brought at site shall be firm's responsibility till the installation is taken over the Department after successful acceptance testing.

### **5. PROGRAMME FOR EXECUTION :**

Within 15 days from the award of work the firm shall submit their programme for submission of drawings for approval, supply of equipment, installation, testing and commissioning works which are required to be undertaken in the first instant.

### **6. APPROVAL OF DRAWINGS :**

The firm shall get system drawings approved from Engineer-in-charge. The approval of drawings will not absolve the responsibilities for supplying and installing the system with the relevant specifications/codes/agreement conditions.

### **7. CO-ORDINATION :**

Generally more than one agency is working in the same premises. It shall be the aim of agencies that on their account the work of other agencies is not delayed. Full co-ordination and co-operation shall therefore be extended during the execution of work for prompt and quality work.

### **8. PAINTING :**

The entire exposed installation including the pipes, cabin etc., shall be painted with one coat of primer followed by two coats of approved colour synthetic enamel paint.

### **9. COMPLETION DRAWINGS :**

Four sets of completion drawings giving following details shall be furnished.

- i) General arrangement drawing to scale showing location with dimensions and clearances and working parameters.
- ii) Control and schematic wiring diagrams and wiring diagrams duly numbering the terminals showing sequence of operation, size of cables etc.

### **10. HANDING OVER THE INSTALLATION :**

After the installation has been completed in all respects, tested successfully and inspected by EE(E), the same shall be taken over by the Department. Necessary operation manuals shall be supplied.

### **11. GUARANTEE :**

Complete installation shall be guaranteed for trouble free operation for a period of 12 months from the date of successful acceptance testing/clearance by EE(E). Any defects discovered or developed during this period shall be rectified by the firm free of charge including replacement of equipment if any.

### **12. MAINTENANCE :**

The firm shall provide free maintenance for 12 months from the date of successful acceptance testing. This shall include four periodical inspections. During these visits, the firm shall inspect the system, adjust necessary controls if required and satisfy the department that the system is in working condition.

The security deposit withheld by the department will be released after four successful visits by the firm during maintenance and guarantee period of 12 months. FIVE PERCENT of the security deposit shall be deducted for not performing each such visit.

The firm shall conduct functional tests of the system by operating the equipments, controls, relays etc., during quarterly periodical inspection visits. The functional test conducted during such visits shall be done in the presence of the Engineer –in-charge. The report thereafter shall be jointly signed.

If the completed system or any part thereof before it is taken over, be found defective or fails to fulfill the intent of the specification, the firm shall, on receipt of the written notice of the Engineer in charge forthwith make good the defects and or make the defective system operational within a stipulated time period mentioned in the written notice or replace the equipment components at no extra cost. The department may make good, reject or replace the same at the risk and expense of the firm the whole portion of the system which is defective or fails to fulfill the requirement of the contract.

### **13. TRAINING OF DEPARTMENTAL STAFF :**

The firm shall arrange to train personnel of the department during execution of work and commissioning of the system in the following and relevant aspects of the installation.

- a) Diagnosing and attending to minor faults and defects which may generally occur during operations.
- b) Operation and maintenance of controls including rectification of minor defects.
- c) Cleaning/replacement of contact fuses, panels etc.

### **14. BYELAWS :-**

The firm shall comply with all bye-laws and regulations of local and statutory authorities having jurisdiction over the works and shall be responsible for payments of all fee and other charges giving and receiving all necessary notices and keep the Engineer-in-charge informed about the notices issued and received. The firm shall get the system/installation approved from concerned fire brigade authorities as required. Any statutory fees payable shall be reimbursed on claims demand proceedings in respect of patent rights design, trade mark or name or other protected rights in respect of any components, equipment work or materials used for in connection with the work and form again all claims damages, proceedings, cost charges and expenses whatsoever in respect of or in relation thereto. The firm shall defend all actions arising from such claims and shall himself all pay the royalties etc.

### **15. GENERAL CONDITIONS :**

The following general conditions of contract are deemed to have agreed.

- a) All civil works such as construction of foundation for the equipment with masonry cutout, chasing etc or the steel support as may be required is included in the scope of work, if not specified otherwise in the schedule of work.
- b) Any damage or breakup which might be caused during the execution of work shall be made good by the firm at his own risk and cost.
- c) The firm is responsible for the removal of debris and waste materials arising out of the work done by him from the site. Site must be kept clean and tidy during the installation.
- d) The firm shall commence the work like laying of cables/pipes only after obtaining the prior permission from the Engineer-in-charge whose decision shall be final and binding.
- e) The department will not provide accommodation for erection crew.

### **16. TERMS OF PAYMENTS :**

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

- 85% after initial inspection and delivery at site in good condition of pro-rata basis.
- 10% after completion of installation in all respect.
- Balance 5% will be paid after testing, commissioning and handing over the department for beneficial use.

### **17. INSPECTION & TESTING :**

- i) The authority's authorized representative shall have full powers to inspect drawings of any portion of the work, examine the materials and workmanship of the contractors works/manufacturing site or at any other place from which the material or equipment is obtained. Acceptance of any material/ equipment shall in no way relieve the contractor of his responsibility for meeting the requirement of specifications but shall have to be rectified by the contractor in case the equipment of work is found defective or of inferior quality.
- ii) Routine type tests for various items of equipment shall be performed at the contractor's works/manufacturer's place and test certificates furnished. The contractor shall permit the authority's authorized representative to be present during any or all these tests. After notification to the authority that the installation has been completed, the contractor shall make under the direction in the presence of Engineer in charge such tests and inspection as have been specified or as the Engineer in charge shall consider necessary to determine whether or not the full intent of requirements of the plans and specifications have been fulfilled. In case the work does not meet the full intent of specifications, it shall be rectified by the contractor at no extra cost and the contractor shall bear all expenses for any further tests considered necessary.
- iii) All the tools, instruments, plants and labour/operating personnel for the test shall be provided by the contractor at his own cost.

iv) Rejection of defective equipments/inspection

If the complete work/equipment or any portion thereof before it is taken over is found defective or fails to fulfill, the intent of specification, the contractor shall, on receipt of a written notice from engineer in charge forthwith make good the defective work/equipment. Should the contractor fail to rectify the defects and or make good the defective work/equipment within a stipulated time mentioned in the written notice, or replace the equipment at no extra cost to the authority, the authority may make good project and /or replace at the risk and expenses of the contractor the whole or any portion of the work/equipment which is defective or fails to fulfill requirement of the contract.

The authority shall have the right to operate all equipments in any operating conditions whether or not such a equipment have been accepted as complete and satisfactory. Repairs and alteration shall be made at such times and as directed by the Engineer in charge.

**18. SAFETY MEASURES :**

The firm shall provide necessary barriers, warnings, signals and other safety measures during the course of execution to avoid any accident. The employees of firm are to be suitably insured against such accident. The Department shall not be responsible for any such incidents.

Concealed items like earthing, cabling, conduiting, etc., shall be carried out only in the presence of the duly authorized Departmental staff.

Offer shall include all charges for packing, handling, forwarding, insurance, loading and stocking for the equipment.

The work shall generally be carried out during working hours. However, as per the Department's requirement the working hours will be extended without any extra claim.

**Tenders with any condition including that of conditional rebate shall be liable for rejection.**

As the time for completion is less than 18 months, 10CC clause is not applicable.

The firm shall provide necessary barriers, warnings, signals and other safety measures during the course of execution to avoid any accident. The employees of firm are to be suitably insured against such accident. The Department shall not be responsible for any such incidents.

Concealed items like earthing, cabling, conduiting, etc., shall be carried out only in the presence of the duly authorized Departmental staff.

Offer shall include all charges for packing, handling, forwarding, insurance, loading and stocking for the equipment.

The work shall generally be carried out during working hours. However, as per the Department's requirement the working hours will be extended without any extra claim.

**Government of india**  
**DEPARTMENT OF POSTS- CIVIL WING**

<b>State</b>	Telangana	<b>Circle</b>	PEC, Bengaluru
<b>Branch</b>	Electrical	<b>Division</b>	PED, Bengaluru
		<b>Sub division</b>	PESD, Hyderabad

**Percentage Rate Tender & Contract for Works**

(A) Tender for the work of:-

**SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor Daksadan Hyderabad .**

(i) To be submitted through e-tendering on 20.05.2026 upto 15.00 hrs. to the Office of the Executive Engineer(E), Postal Electrical Division, Bengaluru.

(ii) To be opened though e-tendering in presence of tenderers who may be present at on 21.05.2026 at 15.30 hrs. in the Office of the Executive Engineer(E), Postal Electrical Division, Bengaluru.

Issued to : \_\_\_\_\_

Signature of officer issuing the documents \_\_\_\_\_

**Designation**

**Executive Engineer(E)**  
**Postal Electrical Division**  
**Bengaluru**

Date of issue :- \_\_\_\_\_

## TENDER

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F, Specification 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 President of India within the time specified in Schedule 'F' viz. schedule of quantities and in accordance in all respects with the specifications, designs, drawings 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 respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for 75 (SEVENTY FIVE DAYS) from last day of receipt of technical bid from the due date of opening thereof and not to make any modifications in its terms and conditions.

**A sum of Rupees 18,191/- is hereby paid/deposited as per OFF LINE or ONLINE mode of payment as mentioned in the NIT as earnest money**

If I/We, fail to furnish the prescribed **performance guarantee** within prescribed period. I/We agree that the said President of India 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 work as specified, I/We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit 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 DOP 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 to use the information in any manner prejudicial to the safety of the State.

Dated \_\_\_\_\_

**Signature of contractor**  
**Postal Address**

Witness:

Address:

Occupation:

### ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of \_\_\_\_\_ (Rupees \_\_\_\_\_)

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

- i)
- ii)
- iii)

For & on behalf of the President of India

Dated \_\_\_\_\_

Signature \_\_\_\_\_  
Designation \_\_\_\_\_

## SCHEDULES

### SCHEDULE 'A'

Schedule of Quantities (BoQ\_XXXXX.xls file on the website against this work item).

### SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

Sl. No	Description of items	Qty	Rates in figures & words at which the	Place of Issue
1	2	3	4	5

Nil

### SCHEDULE 'C'

Tools and plants to be hired to the contractor:

Sl. No	Description	Hire charges per day	Place of Issue
1	2	3	4

NIL

### SCHEDULE 'D'

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

NIL

### SCHEDULE 'E'

Reference to General conditions of contract:

Name of work:- **SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor Daksadan Hyderabad.**

Estimated cost of work	` 909541.00
i Earnest money	` 18191.00
ii Performance Guarantee	5% of tendered value
iii Security Deposit	2.5% of tendered value

### SCHEDULE 'F'

#### General Rules & Direction :

Officer inviting tender :

**Executive Engineer(E)  
Postal Electrical Division  
Bengaluru-560 004.**

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3. (See below)

#### Definitions

2(v) Engineer-in-Charge: Executive Engineer(E), Postal Electrical Division, Bengaluru.

- 2(viii) Accepting Authority: Executive Engineer(E), Postal Electrical Division, Bengaluru.
- 2(x) Percentage on cost of materials and labour to cover all overheads and profits 15%
- 2(xi) Standard schedule of Rates DSR-2025
- 2(xii) Department Department of Posts  
9(ii) Standard CPWD contract Form GCC 2023, CPWD Form 7/8 modified & corrected uptodate

**Clause 1**

- i) Time Allowed for submission, of Performance Guarantee from the date of issue of letter of acceptance 7 days
- II) Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above 3 days

**Clause 2**

Authority for fixing compensation under clause 2. SE (E), Postal Electrical Circle, Bengaluru.

**Clause 2 A**

Whether Clause 2 A shall be applicable No

**Clause 5**

Number of days from the date of issue of letter of acceptance for reckoning date of start 7 days

**Mile stone(s) as per table given below:-**

Sl. No	Description of milestone (physical)	Time allowed in days (from date of start)	Amount with held in case of non achivement of milestone
1	1/8 th (of whole work)	1/4 (of whole work)	In case of not achieving the necessary progress, 1% of the tendered value of work will be withheld for failure of each milestone.
2	3/8 th (of whole work)	1/2 (of whole work)	
3	1/2 th (of whole work)	3/4 (of whole work)	
4	Full	Full	

Time allowed for execution of work 30 days

**Authority to Decide:**

- i) Extension, of time for completion of work. E.E(E) / S.E(E)  
ii) Rescheduling of mile stones S.E(E)

**Clause 5.2**

Nature of Hindrance RegisterPhysical Physical  
(either Physical or Electronic)

**Clause 5.4**

Schedule of rate of recovery for delay in submission of the modified programme in terms of delay days.

Sl. No	Contract Value	Recovery Rs.
I.	Less than or equal to Rs. 1Crore	500
II.	More than Rs. 1 Crore but less than or equal to Rs. 5Crore	1000

III.	More than Rs. 5 Crore but less than or equal to Rs. 20Crores	2500
IV.	More than Rs. 20 Crores	5000

**Clause 6, 6A**

Clause applicable - (6 or 6A) .....N 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 1/3rd amount of E.C. put to tender

**Clause 10A**

List of testing equipment to be provided by the contractor at site lab. N. A.

**Clause 10B(ii)**

Whether Clause 10 B (ii) shall be applicable No

**Clause 10C**

Component of labour expressed as percent of value of work N.A.

**Clause 10CA**

N.A.

**Clause 10CC**

Clause 10CC to be applicable in contracts with stipulated Period of completion exceeding the period shown in next column: Not applicable

**Clause 11**

Specifications to be followed for execution of work: CPWD specifications for Electrical works, Part-I, Internal, 2013, CPWD General Specification for Electrical Works (Part-II-External) 1994 as amended up to date, CPWD General Specification for Electrical Works (Part-IV-Substation) 2013 and specifications mentioned in this NIT.

**Clause 12**

12.2 & 12.3	Deviation Limit beyond which clauses 12.2. & 12.3 shall apply for building work	50%
	& 12.3 shall apply for foundation work	N.A

**Clause 16**

Competent Authority for deciding reduced rates S.E.(E)

**Clause 18**

N.A.

**Clause 25**

Constitution of Dispute Redressal Committee (DRC)	Competent Authority to appoint DRC
DRC shall constitute one Chairman and two members	Chief Engineer or Additional Director General if there is no Chief Engineer

- (i) Conciliator Appointing Authority :- Chief Engineer (E),DOP, New Delhi.
- (ii) Arbitrator Appointing Authority :- Chief Engineer (E), DOP, New Delhi.
- (iii) Place of Arbitration :- Bengaluru

**Clause 36 (i)**

S. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/Technical representative)	Minimum Experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision, of clause 36(I) per month	
						Figures	Words
1	Recognized Diploma Holder	Electrical	Electrical	3 years	1	10000	Ten Thousand Only
2	Recognized Degree Holder	Electrical	Electrical	3 years	--	15000	Fifteen Thousand Only

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

#### Clause 42

- i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates \_\_\_\_\_ printed by C.P.W.D. N.A
- ii) Variations permissible on theoretical quantities. N.A
- a) Cement for works with estimated cost put to tender not more than Rs. 5 lakhs 3% plus / minus
- Cement for works with estimated cost put to tender more than ` . 5 lakhs 2% plus / minus
- b) Bitumen for all works 2.5% plus only & nil on minus side
- c) Steel Reinforcement and structural steel sections for each diameter, section and category 2% plus / minus
- d) All other materials. Nil.

#### RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

Sl. No.	Description of item	Rates in figures and words at which recovery shall be made from the contractor	
		Rate in schedule 'B' plus 10% in case materials issued by Department	Rate in schedule 'B' plus 10% in case materials issued by Department
		Excess beyond Permissible variation	Less use beyond Permissible variation
1	Cement		
2	Steel reinforcement		
3	Structural Sections		
4	Bitumen issued free		N.A.
5	Bitumen issued at stipulated fixed price		

**Form of Performance Guarantee / Bank Guarantee Bond [Reference para 21.1.(1)(V)]**

In consideration of the President of India (hereinafter called “The Government”) having offered to accept the terms and conditions of the proposed agreement between.....and ..... (hereinaftercalled “the said Contractor(s)”) for the work..... (hereinafter called “the saidagreement”) having agreed to production of an irrevocable Bank Guarantee for ₹ ..... (Rupees..... only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

- 1 We, ..... (hereinafter referred to as “the Bank”) hereby undertake to pay to the Government an amount not exceeding ₹ ..... (Rupees..... Only) on demand by the Government.
- 2 We, .....(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the Government stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding ₹..... (Rupees .....only)
- 3 We, the said bank further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
- 4 We, ..... (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineerin- Charge on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
- 5 We, ..... (indicate the name of the Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
- 6 This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
- 7 We, ..... (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.
- 8 This guarantee shall be valid up to .....unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to ₹ ..... (Rupees .....) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged. Dated the .....day of ..... for..... (indicate the name of the Bank)

**DETAILED ESTIMATE**

SCHEDULE OF QUANTITY

**N/W: SITC of 4 nos cassette type split Acs and Audio system at conference Hall at 2nd floor Daksadan Hyderabad .**

SL NO	Description of Items	Quantity		RATE	Unit	Amount
<b>Sub Head 1 : EI PORTION</b>						
1.00	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required					
1.01	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	30	Metres	373.00	Metre	11190
1.02	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	10	Metres	587.00	Metre	5870
2.00	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.					
2.01	3 x 4 sq. mm	30	Metres	222.00	Metre	6660
3.00	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.					
3.01	2 Pair	30	Metres	39.00	Metre	1170
4.00	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.					
4.01	20 mm	30	Metres	151.00	Metre	4530
4.02	25 mm	30	Metres	168.00	Metre	5040
5.00	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.					
5.01	100 mm X 100 mm X 60 mm deep	5	Nos	245.00	Each	1225
6.00	Supplying and fixing following size/ modules, GI box (suitable box in case of surface)alongwith modular base & cover plate for modular switches in recess etc as required.					
6.01	1 or 2 Module (75mm X 75mm)	10	Nos	354.00	Each	3540
7.00	S/F cable management system of following size with accessories as reqd on surface as reqd (M/s Legrand/ Obo-bettermann/ MK)					
7.01	105mmx50mm	10	metres	1583.00	metre	15830

SL NO	Description of Items	Quantity		RATE	Unit	Amount
8.00	S/F partition in existing cable management system of following size with accessories as reqd on surface as reqd (M/s Legrand/ Obo-bettermann/ MK)					
8.01	105mmx50mm	10	metres	303.00	metre	3030
	CASSETTE TYPE SPLIT UNITS					
9.00	Supplying, Installation, Testing and Commissioning of Air Cooled Cassette type Air conditioners complete with Indoor unit(IDU), Out door unit (ODU), R-32/R410A/R-407 Green Refrigerant, wireless Remote, inbuilt drain pump, suitable for 230/415V +10%, 50 Hz ,1 /3 phase AC supply, including surface / concealed copper Refrigerant piping with insulation (closed cell elastomeric nitrile rubber tubular pipe section) upto 5.5 Mtr (IDU to ODU), copper power and control cable upto 5.5 Mtr (IDU to ODU) including drain pipe, the system shall be capable of performing cooling, dehumidification, Air circulation, filtration & ventilation of following capacity with Scroll/rotary compressor with min 5 year Original Equipment Manufacturer (OEM) warranty both compressor and Printed Circuit Board (PCB) as specified. The system shall be able to deliver 100% of the rated capacity as per relevant IS Code. The lab testing reports as per IS: 1391 shall be submitted from National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited as per International Electrotechnical Commission (IEC) 17025 standards/Central Power Research Institute (CPRI)/ Electrical Research and Development Association (ERDA)with Original Equipment Manufacturer (OEM) etc. complete as per CPWD specification and as per IS: 1391 as required.					
9.01	3.0 TR with 5 Star BEE Rating	4	Each	123684.00	Each	494736
10.00	Extra for making holes in slab using core cutting machine (upto 50cm) for taking taking delivery suction and overflow pipes i/c making good the damages etc as reqd.					
		3	jobs	3045.00	job	9135
11.00	Supplying and laying of suction and discharge refrigerant copper piping of suitable size as per manufacturer design duly insulated with minimum 6 mm thick nitrile rubber insulation, power and control cable suitable up to 3TR capacity cassette type A.C unit complete as required.					
		45	mtrs	1481.00	mtr	66645
12.00	P/F 4core 2.5 sq.mm round flexible communication pvc copper cable for connection of indoor/outdoor unit as reqd					
		50	mtrs	238.00	mtr	11900

SL NO	Description of Items	Quantity	RATE	Unit	Amount
13.00	Supplying of 32mm dia CPVC pipe to drain the condensation drain water from the drain tray to the nearest drain point with all necessary accessories i/c bend/ elbow, coupler, union etc as reqd.	30 Metres	631.00	Metre	18930
14.00	S/F of prefabricated heavy duty Cassette type AC outdoor unit stand directly to the wall as reqd.	4 Nos	3318.00	Each	13272
	<b>Audio System</b>				
15.00	SITC of Wall Speaker 25 AV and connections etc as required. Video shielded for use near video monitors (• Extremely smooth frequency response • Stainless steel grille for harsh environments • 60 Watt transformer for 70V or 100V lines, with 8Ω thru • SonicGuard™ overload protection • 130 mm (5¼") polypropylene coated woofer, 10 mm (¾") titanium coated horn-loaded tweeter • Includes InvisiBall® mounting hardware and sealed input panel cover • Screw-down input terminals • 100° x 100° high frequency horn)Make:JBL/BOSE	6 Nos	23281.00	Each	139686
16.00	SITC of 240 Volts 50/60 Hz AC power supply and 36 volts DC Power supply rated Power THD 10% WITH Tone controls and connections etc as required(make-JBL/BOSE)	1 Nos	46481.00	Each	46481
17.00	SITC of studio master microphone with High quality UHF Band frequency dual wire less microphone system and can cover distance 10 feet to 100 feet and two micro phone can be used at the same time .Make-Studio Master Model: TR 44HH	1 Nos	17470.00	Each	17470
18.00	Supplying and fixing 24U Rack with 4 inch Castor wheels and front brake Floor Standing Rack with Main Frame Pillar of 1.25mm Powder Coated CRCA Sheet with removable side panels, L- Shape adjustable Vertical Mounting Rail of 2mm with 'U'Marking completely knocked-down condition (CKD) Shape, fitted with 4 number cooling fans, minimum 5nos two line cable entry/exit provision at top and bottom with rubber protection, Front door 5mm Toughened Glass with MS frame or MS perforated with lock, Rear MS vented or perforated door, Powder coated Color- RAL- 7035 or black, complied with UL & RoHS, 2 x 6 sockets 16A power distribution units, 3 numbers closed cable organizer, Hardware mounting screws packet of 20 x 1 number, etc. complete as required.	1 Nos	21201.00	Nos	21201

SL NO	Description of Items	Quantity		RATE	Unit	Amount
19.00	Supplying and fixing of 2 core 1.5 sqmm copper cable and connections etc as required	100	Nos	120.00	Each	12000
	<b>TOTAL</b>					<b>909541</b>