



**Reserve Bank of India
Estate Department, Hyderabad**

Notice Inviting Tender

Name of the work: “Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank’s Office Building at Reserve Bank of India (RBI), Hyderabad”

e-Tender ID : 2026_RBI_292671_1

A. Eligibility criteria:

1. E-tenders in two parts are invited for **“Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank’s Office Building at Reserve Bank of India (RBI), Hyderabad”**.
2. The work is **estimated to cost ₹ 45,00,000/-** and is to be completed within 30 days from 14th day of date of letter of award of work.
3. Minimum eligibility to participate in the E- tender process are as under-

i) The firm should be Original Equipment Manufacturer (OEM) or eligible OEM's authorized / registered suppliers / distributors / dealers / sales partners / firms (Authorization letter from the OEM to participated in the bid should be enclosed)

AND

ii) **Work Experience:** Experience of minimum 5 years in undertaking similar work of supply and installation of Audio-Video equipment which shall include the supply of components like Amplifiers/ Transmitters/receivers/switches/projector/ displays etc. for office buildings/ Industrial Sector / commercial buildings etc. The similar work should have been completed **on or before September 30, 2021**.

AND

iii) **Qualifying criteria:** The intending tenderer must and have executed successfully similar work of supply and installation of Audio-Video equipment which shall include the supply of components like Amplifiers/ Transmitters/receivers/switches/projector/ displays etc. for office buildings/ Industrial Sector / commercial buildings etc. The similar work should have been completed **on or before September 30, 2026**, individually costing as under:

(a) Three works each costing not less than the amount equal to 40% of the estimated cost

OR

(b) Two works each costing not less than the amount equal to 50% of the estimated cost

OR

(c) One work costing not less than the amount equal to 80% of the estimated cost

And

- (iv) Yearly turnover of 100% of estimated cost duly supported by audited financial statements.

And

- (v) Full-fledged office set up in **Hyderabad/Secunderabad** for rendering after sales service.

provided with supporting documents viz., registration certificate, electricity bills, landline bills, rental agreements should be in the name of the OEM/ OEM's authorized / registered suppliers / distributors / dealers / sales partners / firms.

And

- (vi) Should furnish Bankers 'certificate issued by the Applicant's banker specifically for the purpose of the work, for an amount equal to or greater than the estimated cost of the work (as per Annexure – 'VI').

4. The tender forms will be issued only to those bidders who invariably furnish, at the time of applying for e-tender, the following information in writing and submit relevant documents to satisfy the Bank about their eligibility for participating in the tendering process.

(a)	Composition of the firm	Full particulars (whether contractor is an individual, or a partnership firm, or a company etc.) of the composition of the firm of bidders in details should be uploaded along with name(s) and address (es), of the partner's copy of the Articles of Association/ Power of Attorney/other relevant document.
(b)	Work experience & Completion of similar works of specified value during the specified period	Copies of the detailed work orders for the qualifying works indicating date of award, value of awarded work, time given for completing the work, etc. and the corresponding completion certificates indicating actual date of completion and actual value of executed similar works should be uploaded in proof of the work experience. The details along with documentary evidence of previous experience, if any, of carrying out works for the Reserve Bank of India at any centre, should also be given.
(c)	Credit worthiness of the contractor and their turnover during the specified period	Copies of the Income Tax Clearance Certificates/Income Tax Assessment Orders along with the latest final accounts of the business of the contractor duly certified by a Chartered Accountant should be enclosed in proof of creditworthiness and turnover for last three years should be uploaded.
(d)	Name(s) and address(es) of the Bankers and their present contact executives	Written Information about the names and addresses of bankers along with full details such as names, postal addresses, e-mail IDs, telephone (landline and mobile) nos., fax nos., etc. of the contact executives (i.e., the persons who can be contacted at the office of the bankers of the firm, in case it is so needed) should be uploaded.
(e)	Details of bank accounts	Full particulars of bank accounts, such as account no. type, when opened etc., should be uploaded.
(f)	Name(s) and address(es) of the Clients and their present contact executives	Written information about the names and addresses of clients of the firm along with full details, like names, postal addresses, e-mail IDs, telephone (landline and mobile) nos., fax nos. etc., of the contact executives (i.e., the persons who can be contacted at the office of clients by the Bank in case it is so needed) should be uploaded.
(g)	Details of completed works	The client-wise names of work(s), year(s) of execution of work(s), awarded and actual cost(s) of executed work(s), completion time stipulated in the

		contract(s) and actual time taken to complete the work(s), Name(s) and full contact-details of the officers/authorities/departments under whom the work(s) was/were executed should be uploaded.
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5. Interested bidders must upload relevant documents satisfying all the points as stated above along with techno-commercial (Part-I) bid of tender. The same Eligibility documents and the scanned copy of EMD should be uploaded with Techno Commercial Bid (Part-I) on the CPP portal. It is to be noted that the tender process shall be executed on the CPP portal through e-Tendering.

6. Tender forms will be available for downloading from CPP portal w.e.f. **September 29, 2026**, from **18:00 Hrs.** A pre-bid meeting (off-line mode) for the intending tenderers will be held **on October 09, 2026 at 11.00 AM** at Estate Department, Main Office Building, Reserve Bank of India, Hyderabad.

7. Tenders form can be downloaded for viewing from RBI website www.rbi.org.in or <https://etenders.gov.in/eprocure/app>. **The pre-Qualification papers and scanned copy of proof of EMD payment should be uploaded with Techno Commercial Bid (Part-I) on the CPP portal. The Demand Draft/ Bank Guarantee should reach in original in a sealed envelope to Estate Department, 1st floor, Reserve Bank of India, Hyderabad 500004 by October 20, 2026 up to 13:00 Hrs. If paid through NEFT, the NEFT receipt should be uploaded along with pre-qualification documents.** After scrutiny, if any of the bidders are not found to possess the required eligibility, their tenders will not be accepted by the Bank for further processing. **Further, the contractor should submit the original of the documents to the Bank when demanded to qualify for further tendering process. The duly filled and stamped part-I of tender document should be uploaded by the bidders on CPP portal along with all the pre-qualification documents.**

Interested bidders can participate in e-Tender after getting registered with <https://etenders.gov.in/eprocure/app>.

Online Part I – Techno-Commercial Bid and Part II–Price Bid shall be opened through <https://etenders.gov.in/eprocure/app>. and applicable transaction charges must be paid by the firm.

8. Tender in prescribed format shall be submitted in two parts. Part-I of tender will contain the Bank's standard technical and commercial conditions for the proposed work, the **EMD should be submitted through NEFT transfer to A/C No-8614038, Beneficiary Name: Reserve Bank of India, Hyderabad, IFSC Code- RBIS0NEFTHY (0 is zero), Branch Name – Hyderabad, Branch Address – Reserve Bank of India, Saifabad, Hyderabad 500004 Or by a demand draft issued by a Scheduled Bank in favor of 'Reserve Bank of India, Hyderabad'.** The documents pertaining to EMD should be scanned and uploaded with the **pre-Qualification documents.** Part-II of the tender will contain no conditions but Contractor's Price Bid, Bank's Schedule of quantities, tender drawings, if any, only.

9. Part-I of the tenders will be submitted by the Bidders in CPP portal. The same will be opened by RBI on October 21, 2026, at 14:00 Hrs. Those bidders who would like to depute their representatives, may depute their representatives to Estate Department, 1st floor, Reserve Bank of India, Hyderabad 500004 for the same. Part II of the tender will be opened later. Due intimations will be given for the same.

10. The bidders must submit

a. Client's certificate as per format at Annex IV from their clients for whom they have carried out "eligible works" in terms of the eligibility (Pre-qualification) criteria explained in this notice. The Bank shall obtain reports on the past performance of the

Contractor from their clients and bankers. The Bank shall evaluate the said reports before opening of the Part-II of the tenders. If any contractor is not found to possess the required eligibility for participating in the tendering process at any point of time and / or his performance reports received from his clients and / or his bankers and found unsatisfactory, the Bank reserves the right to **reject his/her offer** even after opening of Part-I of the tender. The Bank is not bound to assign any reason for doing so.

b. Banker's certificate as per format at Annex VI from their banker/bankers.

c. Regarding performance report/ client's certificate, for works carried out for Government/ public sector companies, the certificate should be signed by the concerned Executive Engineer or an officer in an equivalent or higher rank. For works carried out for Private companies, Copy of TDS must be submitted for proving the credentials/contract amount.

11. The Bank is not bound to accept the lowest tender and reserves the right to accept either in full or in part any tender. The Bank also reserves the right to reject all the tenders without assigning any reason there for.

12. Regional Director/Officer-in-Charge, Reserve Bank of India, Hyderabad, reserves the right to accept or reject any or all Bids without assigning any reasons and reserves the right to relax any of the terms and conditions. No Contractor shall have any cause of action or claim against the RBI for rejection of his Bid.

Hyderabad
September 29, 2026

**Regional Director
Reserve Bank of India
Hyderabad**



**Reserve Bank of India
Estate Department
Hyderabad**

e-Tender ID : 2026_RBI_292671_1

e – Tender for Supply, Installation, Testing and Commissioning of Audio & Video System at the Auditorium in the Bank’s Office Building at Reserve Bank of India (RBI), Hyderabad

Part I (Techno-Commercial bid)

This document is the property of Reserve Bank of India (RBI). It may not be copied, distributed, or recorded on any medium, electronic, or otherwise, without the RBI's written permission thereof, except for the purpose of responding to RBI for the said purpose. The use of the contents of this document, even by the authorized personnel/agencies for any purpose other than the purpose specified herein, is strictly prohibited, and shall amount to copyright violation and thus, shall be punishable under the Indian Law.

Disclaimer

Reserve Bank of India, Hyderabad (the Bank) has prepared this tender document. The information is provided to prospective Bidders to enable them to bid for **Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank's Office Building at Reserve Bank of India (RBI), Hyderabad.**

This tender is neither an agreement with any party, nor invitation to any party to perform work of any kind. The purpose of this tender is to share requirements of the Bank with all interested parties to enable them to submit their Bid. **While the Bank has taken due care in the preparation of the information contained herein, the Bank does not claim that the information is exhaustive. Respondents to this tender are required to make their own inquiries and they should not rely solely on the information in tender. The Bank is not responsible if no due diligence is performed by the Respondents.** The Bank reserves the right not to proceed with this tender, to alter the timetable reflected in this document, to update scope of work or to change the process or procedure to be applied. It also reserves the right to decline to discuss the tender further with any respondent. No reimbursement of cost of any type or on any account will be paid to persons or entities submitting their Bid.

SCHEDULE OF TENDER (SOT)

i)	e-Tender ID.	2026_RBI_292671_1
ii)	Mode of Tender	e-Procurement System The tendering would be done only through the e Tendering portal of CPPP. All interested bidders must register with CPPP through the above-mentioned website to participate in the tendering process. https://etenders.gov.in/eprocure/app .
iii)	Tender Value	Estimated cost of work- ₹45,00,000/- (inclusive of all)
iv)	Date of NIT available to parties to download	September 29, 2026, 06:00 PM onwards
v)	Earnest Money Deposit	₹90,000/- from each bidder to be deposited to Bank's account no. RBIS0NEFTHY (0 is zero)-(Please read 0 as zero) through NEFT before last date of submission of tender and its proof of remittance shall be sent to estatehyderabad@rbi.org.in .
vi)	Date and Place of Pre-Bid Meeting	11 AM on October 09, 2026 at Estate Department Reserve Bank of India, Hyderabad.
vii)	Date of Starting of e-Tender for submission of online Techno-Commercial Bid and price Bid at	06:00 PM on September 29, 2026 https://etenders.gov.in/eprocure/app .
viii)	Date of closing of online e-tender for submission of Techno-Commercial Bid & Price Bid.	Up to 01:00 PM on October 20, 2026
ix)	Date & time of opening of Tender Part I	02:00 PM on October 21, 2026
x)	Date of opening of Part II (price bid)	Part II (Price Bid) shall be opened on a later date, and it would be intimated to qualified bidders through email prior to opening of price bid.
xi)	Transaction Fee/ tender fee	Nil
xii)	Bid Validity	Three months (90 days) from the date of opening of the Part I of the tender (Techno-Commercial Bid), the period of which may be extended by mutual agreement, and the bidder/s shall not cancel or withdraw the tender during this period.
xiii)	All disputes arising shall be subject to the jurisdiction	Hyderabad
xiv)	Work Commencement Date	From 14th day of issue of work order

xv)	Time for Completion	30 days from 14th day of issue of work order
xvi)	Penalty / liquidity damage	@0.25% of the contract cost per week of delay and part thereof proportionately, up to 10 % maximum of the contract cost

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**Reserve Bank of India
Estate Department
Hyderabad**

**Section A
NOTICE INVITING e-TENDER**

Name of the work: “Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank’s Office Building at Reserve Bank of India (RBI), Hyderabad”

e-Tender ID : 2026_RBI_292671_1

A. Eligibility criteria:

1. E-tenders in two parts are invited for **“Supply, Installation, Testing and Commissioning of Audio & Video System at the Auditorium in the Bank’s Office Building at Reserve Bank of India (RBI), Hyderabad”**.
2. The work is **estimated to cost ₹ 45,00,000/-** and is to be completed within 30 days from 14th day of date of letter of award of work.
3. Minimum eligibility to participate in the E- tender process are as under-.
 - i) The firm should be Original Equipment Manufacturer (OEM) or eligible OEM’s authorized / registered suppliers / distributors / dealers / sales partners / firms (Authorization letter from the OEM to participated in the bid should be enclosed)

AND

ii) **Work Experience:** Experience of minimum 5 years in undertaking similar work of supply and installation of Audio & Video equipment which shall include the supply of components like Amplifiers/ Transmitters/receivers/switches/projector/ displays etc. for office buildings/ Industrial Sector / commercial buildings etc. The similar work should have been completed on **or before September 30, 2021**.

AND

iii) **Qualifying criteria:** The intending tenderer must and have executed successfully similar work of supply and installation of Audio & Video equipment which shall include

the supply of components like Amplifiers/ Transmitters/receivers/switches/projector/ displays etc. for office buildings/ Industrial Sector / commercial buildings etc. The similar work should have been executed during the last five years and completed **on or before September 30, 2026**, individually costing as under:

(a) Three works each costing not less than the amount equal to 40% of the estimated cost

OR

(b) Two works each costing not less than the amount equal to 50% of the estimated cost

OR

(c) One work costing not less than the amount equal to 80% of the estimated cost

And

(iv) Yearly turnover of 100% of estimated cost duly supported by audited financial statements.

And

(v) Full-fledged office set up in **Hyderabad/Secunderabad** for rendering after sales service.

provided with supporting documents viz., registration certificate, electricity bills, landline bills, rental agreements should be in the name of the OEM/ OEM's authorized / registered suppliers / distributors / dealers / sales partners / firms.

And

(vi) Should furnish Bankers 'certificate issued by the Applicant's banker specifically for the purpose of the work, for an amount equal to or greater than the estimated cost of the work (as per [Annexure – 'VI'](#)).

4. The tender forms will be issued only to those bidders who invariably furnish, at the time of applying for e-tender, the following information in writing and submit relevant documents to satisfy the Bank about their eligibility for participating in the tendering process.

(a)	Composition of the firm	Full particulars (whether contractor is an individual, or a partnership firm, or a company etc.,) of the composition of the firm of bidders in details should be uploaded along with name(s) and address (es), of the partner's
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		copy of the Articles of Association/ Power of Attorney/other relevant document.
(b)	Work experience & Completion of similar works of specified value during the specified period	Copies of the detailed work orders for the qualifying works indicating date of award, value of awarded work, time given for completing the work, etc. and the corresponding completion certificates indicating actual date of completion and actual value of executed similar works should be uploaded in proof of the work experience. The details along with documentary evidence of previous experience, if any, of carrying out works for the Reserve Bank of India at any centre, should also be given.
(c)	Credit worthiness of the contractor and their turnover during the specified period	Copies of the Income Tax Clearance Certificates/Income Tax Assessment Orders along with the latest final accounts of the business of the contractor duly certified by a Chartered Accountant should be enclosed in proof of creditworthiness and turnover for last three years should be uploaded.
(d)	Name(s) and address(es) of the Bankers and their present contact executives	Written Information about the names and addresses of bankers along with full details such as names, postal addresses, e-mail IDs, telephone (landline and mobile) nos., fax nos., etc. of the contact executives (i.e., the persons who can be contacted at the office of the bankers of the firm, in case it is so needed) should be uploaded.
(e)	Details of bank accounts	Full particulars of bank accounts, such as account no. type, when opened etc., should be uploaded.
(f)	Name(s) and address(es) of the Clients and their present contact executives	Written information about the names and addresses of clients of the firm along with full details, like names, postal addresses, e-mail IDs, telephone (landline and mobile) nos., fax nos. etc., of the contact executives (i.e., the persons who can be contacted at the office of clients by the Bank in case it is so needed) should be uploaded.

(g)	Details of completed works	The client-wise names of work(s), year(s) of execution of work(s), awarded and actual cost(s) of executed work(s), completion time stipulated in the contract(s) and actual time taken to complete the work(s), Name(s) and full contact-details of the officers/authorities/departments under whom the work(s) was/were executed should be uploaded.
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5. Interested bidders must upload relevant documents satisfying all the points as stated above along with techno-commercial (Part-I) bid of tender. The same Eligibility documents and the scanned copy of EMD should be uploaded with Techno Commercial Bid (Part-I) on the CPP portal. It is to be noted that the tender process shall be executed on the CPP portal through e-Tendering.

6. Tender forms will be available for downloading from CPP portal w.e.f. September 29, 2026 from 18:00 Hrs. A pre-bid meeting (off-line mode) for the intending tenderers will be held on October 09, 2026 at 11.00 AM at Estate Department, Main Office Building, Reserve Bank of India, Hyderabad

7. Tenders form can be downloaded for viewing from RBI website www.rbi.org.in or <https://etenders.gov.in/eprocure/app>. **The pre-Qualification papers and scanned copy of proof of EMD payment should be uploaded with Techno Commercial Bid (Part-I) on the CPP portal. The Demand Draft/ Bank Guarantee should reach in original in a sealed envelope to Estate Department, 1st floor, Reserve Bank of India, Hyderabad 500004 by October 20, 2026–up to 13:00 Hrs. If paid through NEFT, the NEFT receipt should be uploaded along with pre-qualification documents.** After scrutiny, if any of the bidders are not found to possess the required eligibility, their tenders will not be accepted by the Bank for further processing. **Further, the contractor should submit the original of the documents to the Bank when demanded to qualify for further tendering process. The duly filled and stamped part-I of tender document should be uploaded by the bidders on CPP portal along with all the pre-qualification documents.**

Interested bidders can participate in e–Tender after getting registered with <https://etenders.gov.in/eprocure/app>.

Online Part I – Techno-Commercial Bid and Part II–Price Bid shall be opened through <https://etenders.gov.in/e procure/app>. and applicable transaction charges must be paid by the firm.

8.Tender in prescribed format shall be submitted in two parts. Part-I of tender will contain the Bank's standard technical and commercial conditions for the proposed work, the **EMD should be submitted through NEFT transfer to A/C No-8614038, Beneficiary Name: Reserve Bank of India, Hyderabad, IFSC Code- RBIS0NEFTHY (0 is zero), Branch Name – Hyderabad, Branch Address – Reserve Bank of India, Saifabad, Hyderabad 500004** Or by a demand draft issued by a Scheduled Bank in favor of 'Reserve Bank of India, Hyderabad'. The documents pertaining to EMD should be scanned and uploaded with the pre-Qualification documents. Part-II of the tender will contain no conditions but Contractor's Price Bid, Bank's Schedule of quantities, tender drawings, if any, only.

9.Part-I of the tenders will be submitted by the Bidders in CPP portal. The same will be opened by RBI on October 21, 2026, at 14:00 Hrs. Those bidders who would like to depute their representatives, may depute their representatives to Estate Department, 1st floor, Reserve Bank of India, Hyderabad 500004 for the same. Part II of the tender will be opened later. Due intimations will be given for the same.

10.The bidders must submit

- a) Client's certificate as per format at [Annex IV](#) from their clients for whom they have carried out "eligible works" in terms of the eligibility (Pre-qualification) criteria explained in this notice. The Bank shall obtain reports on the past performance of the Contractor from their clients and bankers. The Bank shall evaluate the said reports before opening of the Part-II of the tenders. If any contractor is not found to possess the required eligibility for participating in the tendering process at any point of time and / or his performance reports received from his clients and / or his bankers and found unsatisfactory, the Bank reserves the right to **reject his/her offer** even after opening of Part-I of the tender. The Bank is not bound to assign any reason for doing so.
- b) Banker's certificate as per format at [Annex VI](#) from their banker/bankers.
- c) Regarding performance report/ client's certificate, for works carried out for Government/ public sector companies, the certificate should be signed by the

concerned Executive Engineer or an officer in an equivalent or higher rank. For works carried out for Private companies, Copy of TDS must be submitted for proving the credentials/contract amount.

11. The Bank is not bound to accept the lowest tender and reserves the right to accept either in full or in part any tender. The Bank also reserves the right to reject all the tenders without assigning any reason there for.

12. Regional Director/Officer-in-Charge, Reserve Bank of India, Hyderabad, reserves the right to accept or reject any or all Bids without assigning any reasons and reserves the right to relax any of the terms and conditions. No Contractor shall have any cause of action or claim against the RBI for rejection of his Bid.

Section B
Important Information

Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank's Office Building at Reserve Bank of India (RBI), Hyderabad

1.e-Tenders are invited in two Parts for “**Supply, Installation, Testing and Commissioning of Audio & Video system at the Auditorium in the Bank's Office Building at Reserve Bank of India (RBI), Hyderabad.** The work is estimated to cost ₹ 45,00,000/- and is to be completed within 30 days from 14th day of date of letter of award of work.

2. Tender forms can be downloaded from CPP portal (<https://etenders.gov.in/eprocure/app>) as per the SOT.

3. The tenders for the above work in two parts i.e., Part-I containing technical specifications and the terms & conditions (Rates and amounts of items shall not appear anywhere in this part) and Part-II containing only rates of items stated in figures and words and amounts in figures **shall be filled/uploaded/attached on the CPP portal as per the SOT, Part-I of the tenders will be opened as per the SOT. Part-II of the tenders will be opened on a subsequent date under intimation to the Bidders.** Bidders are advised not to use any other forms on their own letterhead or otherwise for furnishing any information/rates/amount etc. All the information called for shall be complete in all respects. No enclosure is permitted in Part-II of the tender. Incomplete tenders or tenders not complying with the requirement are liable for rejection.

4. Before submission of tender, the contractor may inspect the site in person on any working day from Monday to Friday between 10:00 a.m. and 5:00 p.m. to study and understand the scope of works specified.

5. The tender of Part I shall be **opened in the** presence of the Bidders or their representatives who choose to be present **and** Price bid (Part II) of such of those tenders who are found eligible after scrutiny of their Part I of the tenders will be opened on a subsequent working day which will be intimated to all the eligible Bidders.

Section C
Form of Tender

The Regional Director
Reserve Bank of India
Hyderabad

Dear Sir,

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

MEMORANDUM

(a)	Description of works	Supply, Installation, Testing and Commissioning of Audio & Video system at the Auditorium in the Bank's Office Building at Reserve Bank of India (RBI), Hyderabad
(b)	Estimated cost	₹ 45,00,000/-
(c)	Mode of payment	NEFT or DD or BG
(d)	Earnest Money	₹90,000 /-
(e)	Performance Bank Guarantee	5% of the Contract Cost (to be submitted by the successful tenderer)
(f)	Percentage to be deducted from bills	5% as Retention Money Deposit
(g)	Time allowed for completion of work from 14 th day of issue of work order	30 days

Having examined the above Memorandum of work (and other details of the work to be executed) and having acquired the requisite information relating thereto as affecting the tender, I/We hereby offer to execute the works specified in the said Memorandum within the time specified in the said Memorandum at the rates specified in the price bid and as per the specifications of the Bank.

Each page of the tender document has been signed for having acquainted myself /ourselves of the conditions of the contract.

Should this tender be accepted, I/We hereby agree to abide by the terms and Conditions of the Bank in this regard which include penalty, defect liability period and terms of payment etc.

I/We undertake to deposit EMD in the form of Demand draft/ /NEFT/BG favouring "Reserve Bank of India, Hyderabad" with Reserve Bank of India, which amount is not to bear any interest. In case, I/We fail to execute the contract, I/We do hereby agree that this sum shall be forfeited by me/us to the Reserve Bank of India.

Our Bankers are:

- i) _____

- ii) _____

Name(s) and address(s) of our Company Proprietor/ Partners of the firm are:

- i) _____
- ii) _____
- iii) _____

For and behalf of M/s

Signature with seal of the partner of the firm

Name:

Designation

Place

Date

(Certified true copy of the Power of Attorney of the above signature should be enclosed

Section D
IMPORTANT INSTRUCTIONS FOR E-PROCUREMENT

Bidders are requested to read the terms & conditions of this tender before submitting their online tender.

Process of E-tender:

A) Registration: The process involves vendor's registration with CPPP e-procurement portal (<https://etenders.gov.in/eprocure/app>) which is free of cost. Only after registration, the vendor(s) can submit his/their bids electronically. Electronic Bidding for submission of Techno-Commercial Bid as well as Price Bid over the internet, will be done. The Vendor should possess Class III signing type digital certificate and digital encryption certificate. Vendors are to make their own arrangement for bidding from a computer connected with Internet. CPPP/RBI is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature).

- 1) Vendors are required to register themselves online at as vendor by filling up details and creating own user id and password→ Submit. <https://etenders.gov.in/eprocure/app>
- 2) Vendors will receive a system-generated mail confirming their registration in their email, which has been provided while filling the registration form.
- 3) For further details, go to Download Guide / Visual / Registration Guide. In case of any clarification, please contact CPPP, (before the scheduled time of the e- tender).
<https://etenders.gov.in/eprocure/app?page=BiddersManualKit&service=page>

Contact person (CPPP):

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

0120-4001 002

0120-4001 005

0120-4493395

Email Support:

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

Technical - support-eproc@nic.in Policy Related - cppp-doe@nic.in

Contact person (RBI):

(Availability: 09:30 AM to 5:30 PM on all working days)

1. Shri Ajay Kumar Kakani, Assistant, Estate Department, 040-23267109.
2. Shri KP Chaithanya Ram, JE(Electrical), Estate Department, 040-23267117.
3. Shri Nilesh Dalal, AM, Estate Department, 040-23267155

4. Shri. Shivam Prajapati, Manager, Estate Department, 040-23267167

B) Process of e-tender:

1. The Technical Bid and the Financial Bid shall have to be submitted online at <https://etenders.gov.in/eprocure/app>.
2. All entries in the tender should be entered in online Technical & Financial formats without any ambiguity
3. Part I Techno-Commercial bid will be opened electronically on specified date and time as given in the NIT.
4. Part II Price bid will be opened electronically of only those bidder(s) whose Part I Techno Commercial Bid is found to be Techno-Commercially acceptable by the Bank. Such bidder(s) will be intimated date of opening of Part II Price bid, through valid email confirmed by them.

Special Conditions:

- All entries in the tender should be entered in online Technical & Commercial Formats without any ambiguity.
- Information about tenders /corrigendum uploaded shall be or updated through CPPP portal <https://etenders.gov.in/eprocure/app> as well as on RBI website <https://www.rbi.org.in>
- E-tender cannot be accessed after the due date and time mentioned in NIT.

Bidding in e-tender:

- a) Earnest Money Deposit shall be remitted to Bank Account of Reserve Bank of India, Hyderabad. The account details for NEFT/RTGS transactions are as follows. Bidders are advised to remit EMD well in advance to avoid last minute hassle.

Account Name: Reserve Bank of India, Hyderabad

Account No: 8614038

IFSC Code: RBIS0NEFTHY (Please read 0 as zero)

Remarks: SITC of Audio & Video system, RBI Hyderabad

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

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

A tender which is not accompanied by such EMD will not be considered. Scanned copy of EMD shall be uploaded in CPPP site.

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

b) The process involves Electronic Bidding for submission of Technical and Commercial Bid.

c) The vendors are advised to read relevant document guides for registration, DSC activation, as well as submission of online bid available on CPPP portal.
<https://etenders.gov.in/eprocure/app?page=BiddersManualKit&service=page>

e) In all cases, vendors are advised to use their own ID and Password along with Digital Signature at the time of submission of their bids.

f) During the entire e-tender process, the vendors will remain completely anonymous to one another and to everybody else.

g) The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above.

h) All electronic bids submitted during the e-tender process shall be legally binding on the vendor. Any bid will be considered as the valid bid offered by that vendor and acceptance of the same by the Buyer will form a binding contract between Buyer and the Vendor for execution of supply.

i) It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system.

j) Buyer reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.

k) No deviation of the terms and conditions of the tender document is acceptable. Submission of bid in the e-tender floor by any vendor confirms his acceptance of terms & conditions for the tender.

l) Any order resulting from this tender shall be governed by the terms and conditions mentioned therein.

m) The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reasons thereof.

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

Section E
GENERAL INSTRUCTIONS TO BIDDERS & SPECIAL CONDITIONS

1.1 e-tenders in two parts are invited for **Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank's Office Building at Reserve Bank of India (RBI), Hyderabad. The work is estimated to cost ₹45,00,000/- and is to be completed within 30 days from 14th day of date of letter of award of work.**

1.2 Minimum eligibility to participate in the E- tender process are as under-

i) The firm should be Original Equipment Manufacturer (OEM) or eligible OEM's authorized / registered suppliers / distributors / dealers / sales partners / firms (Authorization letter from the OEM to participated in the bid should be enclosed)

AND

ii) **Work Experience:** Experience of minimum 5 years in undertaking similar work of supply and installation of Audio-Video equipment which shall include the supply of components like Amplifiers/ Transmitters/receivers/switches/projector/ displays etc. for office buildings/ Industrial Sector / commercial buildings etc. The similar work should have been completed on **or before September 30, 2021**

AND

iii) **Qualifying criteria:** The intending tenderer must and have executed successfully similar work of supply and installation of Audio-Video equipment which shall include the supply of components like Amplifiers/ Transmitters/receivers/switches/projector/ displays etc. for office buildings/ Industrial Sector / commercial buildings etc. The similar work should have been executed during the last five years and completed on or **before September 30, 2026**, individually costing as under:

(a) Three works each costing not less than the amount equal to 40% of the estimated cost

OR

(b) Two works each costing not less than the amount equal to 50% of the estimated cost

OR

(c) One work costing not less than the amount equal to 80% of the estimated cost

And

(iv) Yearly turnover of 100% of estimated cost duly supported by audited financial statements.

And

(v) Full-fledged office set up in **Hyderabad/Secunderabad** for rendering after sales service.

provided with supporting documents viz., registration certificate, electricity bills, landline bills, rental agreements should be in the name of the OEM/ OEM's authorized / registered suppliers / distributors / dealers / sales partners / firms.

And

- (vi) Should furnish Bankers 'certificate issued by the Applicant's banker specifically for the purpose of the work, for an amount equal to or greater than the estimated cost of the work (as per [Annexure – 'VI'](#)).

NOTE: The above all documents to be uploaded on CPP portal. e-tender submitted by a contractor who is found to be not satisfying the above criteria will be liable for rejection.

1.2 The tenders for the above work in two parts i.e., **Part-I** containing technical specifications and the terms conditions (Rates and amounts of items shall not appear anywhere in this part) and **Part-II** containing only rates of items stated in figures and words and amounts in figures shall be submitted on CPP portal as per the SOT. Part-I (Techno commercial bid) of the e-tenders will be opened as per the SOT. **Part-II of the eligible qualifying tenders will be opened on a subsequent date under intimation to all the Bidders.** Bidders must apply for the e-tender only through CPP portal and not to use any other forms on their own letterhead or otherwise for furnishing any rates/amount etc. All the information called for shall be complete in all respects.

No enclosure is permitted in Part II of the tender. Incomplete tenders or tenders not complying with the requirement are liable for rejection.

If the intending Contractor feels that any of the terms and conditions of the tender documents is not acceptable to them or they feel that additional terms and conditions are required to be incorporated, they may indicate these conditions or additional or amended conditions only in separate sealed cover (duplicate). All other terms and conditions on which there are no observations by the intending Bidders shall be constructed as acceptable to the Contractor.

- (a) Part-II of the Tender, containing only rates of items and amount stated in figures and words will be opened on a subsequent date to be intimated to all the Bidders.
- (b) Tenders shall remain open to acceptance by the Bank for a period of three months from the date of opening Part-I of the Tender which period may be extended by mutual agreement and the Contractor shall not cancel or withdraw the Tender during

this period.

- a. No advice of any change in rate or conditions after the opening of Part II of the tender will be entertained.
- b. Each of the tender documents should be signed by the person or persons submitting the tender in token of his/their having acquainted himself/themselves with the General Conditions of Contract, Specifications, and Special Conditions etc. as laid down. Any tender with any of the documents not signed will be rejected.
- c. The Contractor submitted on behalf of a firm shall be signed by all the partners of the firm or by a partner who has the necessary authority on behalf of the firm to enter the proposed contract, otherwise the tender may be rejected by the bank.
- d. The Reserve Bank of India does not bind itself to accept the lowest or any tender and reserve to itself to accept or reject any or all the tenders either in whole or in part, without assigning any reasons for doing so.

1.3 Earnest Money: The Bidders shall pay as EMD by way of a demand draft drawn on scheduled bank payable to Reserve Bank of India, Hyderabad or NEFT. A tender which is not accompanied by earnest money will not be considered. The earnest money deposit of all tenders other than successful tenderer shall be refunded on expiry of bid validity (including extended validity) or on award of work to the successful tenderer whichever is earlier but without any interest.

Under no circumstances, Earnest Money Deposit will be accepted in any other form than mentioned above.

The Earnest Money Deposited by the successful tenderer in the form of DD/BG initially valid for 4 months, shall remain un-discharged for such period as may be specified for keeping the tender open.

The EMD of successful Contractor shall be released on acceptance of the tender and on production of a Bank Guarantee called “**Performance Bank Guarantee of 5% of contract amount (PBG)**” from any scheduled bank in the form prescribed by the Bank in Annex (III) towards security deposit for due fulfilment of the contract.

1.4 On receipt of intimation from the Bank of the acceptance of his/their tender, the successful Contractor shall be bound to implement the contract and within ten days thereof the successful Contractor shall sign an agreement in accordance with the draft agreement and the Schedule of Conditions but the written acceptance by the Reserve

Bank of India of a tender will constitute a binding contract between the Reserve Bank of India and the person so tendering whether such formal agreement is or is not subsequently executed.

1.5 i. Performance Bank Guarantee (PBG) as Security deposit for completion period: On award of the work, within 14 days, the successful Contractor shall furnish an amount **equal to 5% (Five percent) of** the contract value in the form of a Bank Guarantee (BG) from any scheduled Bank in the form prescribed by the Bank as per [Annexure III](#) towards security deposit or amount equivalent to PBG through online mode (NEFT / RTGS) for the entire period of currency of contract for due fulfillment of the contractual obligations by the contractor for the due fulfilment of the contract. The amount of Bank Guarantee will be valid for a period of Five (5) years i.e. (one-year DLP plus four years CAMC) from the date of virtual completion and shall be suitably extended till completion of the work plus two (2) months in case of extension of contract period.

If the Contractor fails to furnish the Performance Bank Guarantee within stipulated period i.e., within 14 days of award of work, in case of delays in submission in unavoidable circumstances, charges for delay in submission of Performance Bank Guarantee shall be recovered from the bills of the contractor at Bank rate.

ii. Retention Money (RM): In addition to 5% PBG, retention Money @ 5% will be deducted from each bill and retention money shall be released after satisfactory completion of defect liability period (DLP) **of one year**. The amount retained by the Bank shall not bear any interest.

iii. Terms of payment -

The payment for the works to be executed under this contract shall be made as follows and no variation in the mode of payment will be acceptable to the Reserve Bank of India.

- 60% of the quoted rate pro-rata against receipt of the material at site and on submission of the following documents in specified period.
 - i) Manufacturer's Inspection and Test Certificates
 - ii) Tenderer's Certificate that all components, parts, sub systems, consumables etc. for successful installation, commissioning and testing of

the systems including maintenance have been received at site in good condition and if any shortfall is noticed during installation, commissioning and testing they will be supplied free of cost to the Bank.

- iii) Policies of insurance covering all the risks during storage, installation, commissioning, testing and handing over including third party liabilities.
- 20 % of the quoted rate pro-rata against erection, testing, commissioning and handing over.

Balance 20 % of the quoted rate of the work will be released after handing over of the entire system subject to submission of BG of 5% contract amount valid **up to five years**.

1.6 All compensation or other sums of money payable by the Contractor to the Bank under the terms of this Contract may be deducted from his/her earnest money and the security deposit if the amount so permits and the contractor shall, unless such deposit becomes otherwise payable, within ten days after such deduction make good in cash the amount so deducted.

1.7 The Bidders shall furnish full details of all such similar works carried out by them during the last 5 years, as per the proforma included in this tender. The Bank will inspect one or all the works and satisfy itself about the performance of the work including the quality and completion time, etc. before opening Part II of the tenders. Thereafter, the Bank at its discretion will consider or reject any or all the tenders without assigning any reason, therefore.

1.8 The Contractor shall carry out all the work strictly in accordance with drawings, details, and instructions of the Bank's Engineer. The bidders are requested to check all the drawings related to this work, which are available at Estate Department, Hyderabad Office, before submission of the tender.

1.9 The rates quoted shall be firm and shall not be subjected to variations in exchange rate, rate of taxes, duties, levies, or variation in labor rates. The rates shall be quoted for complete work and shall include charges for all taxes, duties, levies, consumables, labour, transport, insurance for transit, storage as also workmen compensation & 3rd party liability policies, execution & handover the executed work to the Bank. No concessional form for any taxes, duties and levies will be issued by the Bank. Similarly, no import license will be issued by the Bank. All payments will be made at Hyderabad and will be in Indian rupees only. The Bidders are advised **to include the GST** in the quoted amount.

1.10 Bidders are advised to quote strictly as per BOQ. The schedule of quantities is based on probable quantities. The Contractor should note that unless otherwise stated the tender is strictly on item rate basis and his attention is drawn to the fact that rates for the Schedule of Quantities approximately indicate the total extent of work but may vary to each item should be correct, workable and self-supporting. The quantities up to any extent and may even be omitted depending upon the site conditions and requirements solely at the discretion of the Bank thus altering the aggregate value of the Contract. No claim shall be entertained on this account.

1.11 The tender shall be accompanied by leaflets/literatures giving complete technical & constructional details along with list of make in offered if any with Part-I of tender.

1.12 The Contractor must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of making a tender and for entering into a contract and must examine the Drawings (which are available at Estate Department) and must inspect the site of the work and acquaint himself with all local conditions, means of access to the work, nature of the work and all matters pertaining thereto.

1.13 Time allowed for carrying out the work as mentioned in the Memorandum shall be strictly observed by the Contractor and it shall be reckoned from the day after written order to commence the work is issued. The work shall throughout the stipulated period of the Contract be proceeded with all due diligence and if the Contractor fails to complete the work within the specified period, he/she shall be liable to pay compensation as defined in of the Conditions of Contract. The Contractor shall before the commencing of work prepare a detailed work program which shall be approved by the Bank's Engineer.

1.14 The Contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing of the work, whatever the cause of delays may be, including delays arising out of modifications to the work entrusted to him or in any sub-contract connected therewith or delays in awarding contracts for other trades of the project or in commencement or completion of such works or in procuring Government controlled or other building materials or in obtaining water and power connections for construction purposes or for any other reason whatsoever and the Bank shall not be liable for any claim in respect thereof. The Bank does not accept liability for

any sum besides the tender amount, subject to such variations as are provided for herein.

1.15 The successful Contractor is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing by the Architect with the prior consent in writing of the Bank.

1.16 The successful Contractor must co-operate with the other bidders appointed by the bank so that the work shall proceed smoothly with the least possible delay and to the satisfaction of the Bank.

1.17 The Contractor must bear in mind that all the work shall be carried out strictly in accordance with Specifications made by the Architects and in compliance of the requirements of the local public authorities and to the requirements.

1.19 The successful Contractor shall execute an agreement with the Bank on stamped paper of appropriate value as per stamp act within ten days of receipt of letter of acceptance. However, the issue of letter of acceptance by the Bank shall be construed as a binding contract, as though such an agreement has been executed and all the terms and conditions shall apply on this contract.

1.20 The payment for the system will be made by Hyderabad Office to which the system is supplied and installed. Any dispute arising out of this contract will also be sorted out within the jurisdiction of Hyderabad only.

1.21 The Contractor shall furnish the name and address of the Bankers with whom they normally Bank. They shall also furnish the name and addresses of their recent clients for whom they have carried out similar works/supplies in the recent past, along with full details like the cost and capacity of the system/machine supplied, the date of the supply etc.

1.22 The Bank reserves the right to accept or reject any or all the tenders either in full or in part without assigning any reasons thereof.

1.23 The Contractor shall strictly comply with the provision of safety code annexed hereto.

1.24 The contractor shall submit the names and personal details of site in-charge/ supervisor and his authorized representative along with their role, responsibilities, and authority (regarding supervision, quality control, documentation,

measurements, signing measurement book, correspondence, receiving instructions from bank etc.) within 2 days from the date of issue of work order.

1.25 All the bidders shall submit a detailed bar chart indicating the details of various major activities involved in the work and their expected completion period, specifying the parallel and sequential activities, starting from the scheduled commencement of work to complete the entire work within the tender specified period along with the Part-I of the tender. The bidders shall also indicate the approximate deployment of manpower/ labour, as planned by them for the above purpose, commensurate with the planned schedule. After award of work, the contractor shall be required to carry out micro planning and the detailed schedule/ Bar Chart shall be submitted within 2 days from the date of issue of work order for proper planning, monitoring, and review of progress of work.

1.26 The progress of work shall be reviewed by the Bank monthly. The meeting may be held at site or in Bank's Main Office Premises. The meeting should be attended by the contractor himself (in case of proprietorship firm) or authorized partner/ senior official in case of partnership firm/ limited company along with contractor's site in-charge. For this purpose, the contractor shall prepare and submit a progress report indicating following:

- a) Progress for the previous month and the planning for the next month.
- b) The reasons for major deviations in planned schedule and the actual progress achieved along with any hindrances/ decisions required from the Bank.
- c) Procurement schedule for long lead items
- d) Variations / extra item statement
- e) Statement indicating various tests conducted during the month and planned for next month.

1.27 The contractor shall maintain following registers/ documents at site and keep them updated on a regular basis. These registers/ documents after completion of work shall be handed over to the Bank:

- a) Hindrance registers in the Bank's approved format
- b) Site instruction book (in duplicate)
- c) Certified true copy of the contract

1.28 The contractor shall use only approved brands of materials as given in the Annexure. In absence of any such choice indicated by the tenderer in the Part – I, the contractor will be required to use the material as per Bank's instructions.

1.29 Wherever the basic rate for the material is specified, the contractor should furnish all the paid bills for Bank's verification. The purchase rate shall be got approved from the Bank before purchasing. The adjustment in price shall be made only on measured quantity. No overhead and profit shall be considered on the cost difference. The basic prices are ex-godown and are inclusive of excise duty, sales tax, octroi and all other duties levied by Local authority / Government. The rate quoted shall include transportation to site, storing and handling etc.

1.30 Bank will require the contractor to produce, samples of all the materials, accessories/finishes prior to procurement/manufacture. The Bank's Engineer shall approve samples of the materials for the work. Failure to comply with these instructions can result in rejection of the work.

1.31 Scope of work, terms and conditions during Warranty/ Defects Liability Period

(a) The entire system shall be warranted against any manufacturing/design/ installation defects etc. for a minimum period of one year. During this period any defect observed in the system shall be rectified along with replacement of spare parts in free of cost within 2 days of the observation of the defect and intimation of the same to the firm without any additional cost to the Bank.

(b) Supply and replacement of all spares, consumables and parts in free of cost required for smooth operation and serviceability of the system shall be the responsibility of the contractor during this period. In this respect the contractor shall maintain sufficient spares/consumables for immediate replacement of defective / damaged part during day-to-day routine maintenance / breakdown maintenance. Cost of these spares and any other spares which may be required during maintenance is deemed to be included in the rates quoted by the contractor. **The periodicity of service shall be quarterly or more depending upon the site conditions.**

(c) Penalty for delay in rectification of fault during DLP: The complaints, forwarded by Bank's Engineer/ Caretaker/ user over telephone call/ e-mail/ text message etc. shall have to be rectified within stipulated time failing which penalty as laid down in following table (subject to 10% of CAMC charges) shall be levied. Any penalty during the DLP

shall be recovered from any dues payable to the contractor or invoke from the bank guarantee.

Sr, No.	Response time and penalty for each system	Rectification time	Penalty
(a)	Any defects resulting in total failure of the system	24 hours	Rs.1000/- per day
(b)	Any defects in independent devices, components, cables which may not result in total failure of the system	72 hours	Rs.500/- per day

13. Deployment of maintenance staff

The contractor will depute technically qualified, competent, and experienced staff for Comprehensive maintenance of Audio & Video system. It may also be noted that normally scheduled maintenance activity shall be carried out on Saturday & Sunday or Any Gazetted Holiday or working day for which the contractor will inform at least 24 hours in advance to the Bank's engineer for arranging the entry pass and granting access to Contractor's personnel at site.

Attending complaints

- a) All defects and deficiencies should be rectified promptly after lodging of complaint. The complaint can be lodged by Bank's Engineer/ Caretaker/ concerned user through e-mail/ telephonic message/ text message. For expeditious disposal of complaint, contractor will keep sufficient reserve of unit exchange spare quantity & item to be kept as unit spares shall be jointly decided with Bank's Engineer.
- b) The contractor will furnish Telephone No. and his contact person to whom the complaint has to be lodged. A three tier Complaint Escalation Matrix shall be submitted by the Contractor clearly indicating Names, Designations, Telephone numbers and e-mail ID of concerned officials to whom the complaints shall be forwarded.

Maintenance schedules: In addition to attending to complaints, the contractor will be required to carry out prescribed maintenance schedules/ preventive maintenance. The maintenance and preventive maintenance schedules and the work to be done in each schedule shall be jointly decided in consultation with Bank's Engineer.

Identity Cards: The identity cards will be issued to the workman`s employed by the contractor after proper police verification for which Contractor shall submit a list of workers to be deployed on site of work. They will be required to carry the identity cards with them during their working inside the building

1.33 Payment of service charges during comprehensive annual maintenance service (CAMS):

The payment during the CAMS period shall be made **on a half yearly basis** on rendering satisfactory services against invoice raised by the firm. The invoice should be accompanied by duly signed service reports in acknowledgement of services rendered.

1.34 Renewal of Comprehensive Annual Maintenance Contract (CAMC)

The service contract shall be renewed for an additional period of at least 3 years after the initial annual service contract period of 1 year after expiry of 1 year warranty period. While renewing the contract the new contract amount will be arrived at based on following formula.

$A_C = A_P [(10+65x(EPI_C/EPI_P) + 25x(CPI_C/CPI_P)) / 100]$	
A_C	The contract amount for the current year.
A_P	The contract amount for the previous year.
EPI_C	Wholesale Price Index for Electrical Products 6 months prior to the commencement date of contract for the current year.
EPI_P	Wholesale Price Index for Electrical Products 6 months prior to the commencement date of contract for the previous year.
CPI_C	Consumer Price Index for Industrial Workers (All India Average) 6 months prior to the commencement date of contract for the current year
CPI_P	Consumer Price Index for Industrial Workers (All India Average) 6 months prior to the commencement date of contract for the previous year.

The successful Tenderer shall enter into an agreement for comprehensive annual maintenance contract of the system with the Bank.

1.35 Financial Evaluation of tender price bid

- Tenders will be evaluated on the basis of capital cost of the system and taking into account the effect of rates quoted for comprehensive service contract for a period of **four years** after the expiry of one year of defect liability / guarantee period .
- Tendered offers shall be evaluated on the basis of Total cost of ownership considering the Capital cost and net present value (NPV) of the Comprehensive Annual Maintenance Service Contract (CAMSC) charges for the period of four years after initial Warranty period of one year and its net present value (NPV).

The said NPV shall comprise:

1.	Cost of Audio & Video system	Say (A)
2.	NPV of Comprehensive Annual Maintenance Service Contract charges for the period of 04 years after 1-year defect liability period shall be calculated assuming 5% increase in contract amount every year after first year of CAMSC, quarterly payment with a discounted rate of 8%. Thus, the Multiplying Factor (MF) for working out NPV of CAMSC for 04 years (after 1-year guarantee/warranty period) will be calculated. Note: (i) CAMSC amount for calculating the NPV shall be taken as quoted in the Part II of the tender OR 5 % (as per industry practice) of the capital cost of only Audio & Video system whichever is higher. (ii) Payment for CAMSC shall, however, be made strictly as per rates and amounts quoted in the Part II of tender under head of CAMSC.	Say (B)
3.	NPV of Owning the Audio & Video System for 5 years of useful service life shall be worked out as $[(A) + \{CAMSC \text{ rate}(B) \times MF\}]$	Say (C)
(d)	The work will be awarded for the lowest value of (C) above.	

Total Cost of Ownership (C) = {[Capital Cost (A)] + [MF (1.56) *CAMSC Rate(B)]}

- **For Comprehensive AMC: Notwithstanding the above, the Bank shall pay only the quoted rate of the CAMC during the currency of the committed contract period subject only to escalation formulae indicated in the tender.**

I/We have understood all the above-mentioned conditions and they are acceptable to me/us.

Place:

Signature of Tenderer

Date:

Name:

Designation:

Seal of the firm

SPECIAL CONDITIONS

1. The workmen will not be allowed to stay within the premises.
2. The water required for the work or workmen can be availed from the available source at site free of cost. The Contractor must tap the same from the point shown to them at their own cost.
3. The electric power required for the work can also be similarly drawn from the supply available at site free of cost. The Contractor must tap the same from the point shown to them at their own cost.
4. Permission, if any, required from the local bodies shall be obtained by the Contractor at their cost.
5. Even though in finishing items, the number of coats of paint/polish are mentioned, the contractor shall note that the entire furniture be finished in top class while handing over, including, if necessary, additional coat of painting/polishing etc. without any extra cost.
6. The intending tenderer can obtain any clarifications regarding the tender drawings, specifications etc. if any from the office of the Deputy General Manager, Reserve Bank of India, Estate Department, Hyderabad, on any Bank's working day.
7. The entire materials for the work shall be brought to the working area through the staircase. The delivery of materials shall be given on the floors specified in the tenders.
8. Wherever the basic rate for the material is specified, the contractor should provide to the Bank for verifications all paid bills of purchased materials for ascertaining the actual rate of purchase to settle the difference in cost of material. The rate shall be got approved from the Bank before purchasing. The adjustment in price of materials shall be made on measured quantity only. No overhead or profit shall be considered on the cost difference. The basic price for the materials shall be taken as the cost of material at dealer's godown inclusive of taxes.
9. The debris/dust or any wastage generated out of the above work shall be cleaned as frequently as required and as instructed by the Bank's Engineer away from the bank's premises.
10. The tenderer shall use only approved brand materials.
11. A qualified, experienced, and responsible full-time supervisor shall be posted at site who can receive instructions, maintain account of materials etc. take decisions at site, without waiting for the instructions of the contractor.
12. No lapses from the Bidders side, which may cause damage to the occupants.
13. The work must be carried out with least inconvenience to the staff.

14. Programme should be submitted before commencement of work to enable the Bank to intimate the occupants in advance for smooth working and better progress and the time schedule should be strictly adhered to.
15. No labourers shall be permitted to stay inside the campus after working hours.
16. The Bidders must obtain permission from the local authorities as per the existing local byelaws for such works and the charges/fees if any, has to be borne and paid by the contractor including water and draining charges.
17. The contractor should have valid Labour license from Labour Commissioner wherever the number of labourers engaged is 20 or more.
18. Works contract/ VAT shall be deducted as per instructions of Government at source. The rate quoted shall include all such taxes and levies.
19. The contractor shall have the addresses and photographs of their workmen being engaged by them for the said work. The entry of workmen will be allowed inside the building only on producing the photo pass issued by the Bank's Caretaker.
20. Before quoting the rates, contractor should inspect the site and understand the nature and scope of the work for themselves.
21. Any damage cause to any of Bank's properties shall be made good by the contractor at their own cost.
22. The contractor shall carry out the work strictly in accordance with specification details and instructions of the Bank's Engineer.
23. The Contractor shall make their own arrangements for storing of their materials at site.
24. The Contractor shall keep the Bank indemnified against all claims, if any.
25. The contractor shall only use MS 'H' frame scaffolding.
26. The Contractor shall ensure payment of minimum wages to the workmen employed by him as per Central Labour Commissioner's rates and obtain their signature or thumb impression on wage slip. A copy of such wage slip shall be submitted to the Bank.
27. Successful contractor shall provide a proper uniform to their worker engaged on site for identification purpose.
28. Successful contractor shall post a qualified Engineer at site during execution that shall follow necessary instruction given by the Bank's Engineer from time to time including keeping proper record of chemicals and cement brought at site including maintaining the record of day-to-day consumption.

Place:

Date:

Signature of Tenderer with seal

Section F
A) SAFETY CODE

1. First aid appliances including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
2. An injured person shall be taken to a public hospital without loss of time, in cases where the injury necessitates hospitalization.
3. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from the ground.
4. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used an extra mazdoor shall be engaged for holding ladder.
5. The excavated material shall not be placed within 1.5 meters of the edge of trench of half of the depth of trench whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
6. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.
7. No floor, roof or other part of the structure shall be so overloaded with debris or materials as to render it unsafe.
8. Workers employed on mixing and handling material such as asphalts, cement mortar or concrete and lime mortar shall be provided with protective footwear and rubber hand gloves.
9. Those engaged in welding works shall be provided with welder's protective eye-shields and gloves.
10. (i) No paint containing lead or lead products shall be used except in the form of paste of readymade paint.
(ii) Suitable facemasks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped.
11. Overalls shall be supplied by the Contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the periods of cessation of work.

12. Hoisting machines and tackle used in the works, including their attachments, anchorage and supports shall be in perfect condition.
13. The ropes used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength and free from defects.
14. To strictly follow health related protocol at work site as advised by authority/authorities.

B) ELECTRICAL SAFETY

1. All the temporary electrical power for carrying out various services at site such as cutting / drilling machine shall be provided through properly rated earth leakage protection devices (ELCB).
2. Only ISI marked 3 pin plug and other appliances and equipment's shall be used.
3. Electrical power cables / wires used shall be properly rated and joints should be avoided. If there, the joint should be proper and insulated.
4. All electrical appliances i.e., welding, drilling, cutting machine, etc. shall be safely and securely earthed to prevent leakage current while in operation.
5. Before commencing the welding work for the first time on any day, fire section shall be informed.
6. Fire buckets filled clean dry sand and ready for immediate use for extinguishing fires, in addition to fire extinguishers suitable for dealing with fires, shall be conspicuously marked, and kept at site at convenient location.
7. Personal protective equipment such as safety shoes, hand gloves, welder's mask, ear plugs, etc. as applicable depending upon the requirement of the work, shall be used by the workmen to prevent occupational health hazards.
8. The safety belt shall be used by the workmen while working from height for more than 10 feet from ground level.
9. None of the passages near lift lobby and staircases shall be used for stacking / dumping any kind of materials/waste.
10. Power supply shall be switched off from the Mains when equipment is not in use.
11. Wood-shavings, saw-dust or any debris generated from the work shall be collected on daily basis, removed from site, and stored at the designated place in proper manner.
12. The work site shall be properly illuminated during the work.
13. All the electrical works should be carried out by licensed / authorized electricians / wiremen.
14. Portable battery-operated lights may be used at work site to avoid laying of temporary wire for lights.
15. Necessary barricading and signage boards of good quality shall be fixed at conspicuous locations at the work site.

16. Aluminum / steel ladders should have proper rubber insulation at the base and wherever required, these ladders shall be kept on electrical insulating safe rubber mats.

C) FIRE SAFETY

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

Place:

Date:

Seal & Signature of the Tenderer.

I/We hereby declare that we have read and understood the safety code of the tender and will fully abide by the same, should the work tender be awarded to me/us.

Place:

Date:

Signature & seal of the contractor

Section G

The Conditions Herein before Referred To

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

- | | |
|---------------------------|---|
| a) "Employer" | Shall mean the Reserve Bank of India and shall include its assignees and successors. |
| b) In the case of company | "Contractor shall mean _____ a company incorporated under _____ and having its registered office at _____ and shall include its successors and assigns. |
| c) "Site" | Shall mean the site of the contract works including any building and erection thereon and any other land (inclusively) as aforesaid allotted by the Employer for the Contractor's use. |
| d) "This Contract" | Shall mean the Article of Agreement, the special conditions, the conditions, the Appendix, the schedule of quantities and specifications attached hereto and duly signed. |
| e) "Notice in writing" | Shall mean a notice in written, typed or printed or written notice" characters sent (unless delivered personally otherwise proved to have been received) by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post it would have been delivered. |
| f) "Act of Insolvency" | Shall mean any Act of insolvency as defined by the Presidency Town Insolvency Act, or the provincial insolvency Act or any Act amending such original Act. |
| g) "Net Prices" | If in arriving at the contract amount the Contractor shall have added to or deducted from the total of items in the Tender any sum, either as a percentage or otherwise, then |

net price of any item in their tender shall be the sum arrived at by adding to or deducting from the actual figures appearing in the Tender as the price of that the item a similar percentage or proportionate sum provided always that in determining the percentage or proportion of the sum so added or deducted by the Contractor the total amount of the any Prime Cost items and provisional sums of money shall be deducted from the total amount of the tender. The expression "net rates" or "net prices" when used with reference to the contract or account shall be held to mean rates or prices so arrived at.

h) "The works" Shall mean **“Supply, Installation, Testing and Commissioning of Audio & Video system at the Auditorium in the Bank’s Office Building at Reserve Bank of India (RBI), Hyderabad”**.

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

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

The contractor shall forthwith comply with and duly execute any work comprised in such Bank's Engineer's instructions provided always that verbal instructions, directions and explanations given to the Contractor or his representative upon the works by the Bank's

Engineer shall, if involving a variation, be confirmed in writing by the Contractor within seven days, such shall be deemed to be Employer's instructions within the scope of the Contract.

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

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

The contractor shall bring to the attention of the Employer all notices required by the said Acts, regulations or bye-laws to be given to any authority and pay to such

authority or to any public office all fees that may be properly chargeable-in respect of the works and lodge the receipts with the Employer.

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

6. **Setting out of work**: The contractor shall set out the works and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions levels, dimensions and alignment of all parts thereof. If at any time any error in this respect shall appear during the progress of the works or within a period of one year from the completion of the works, the Contractor shall, if so required, at his own expense rectify such error to the satisfaction of the Bank's Engineer.
7. **Materials and Workmanship to conform to description**: All materials and workmanship shall so far as procurable be of the respective kinds described in the Schedule of Quantities and/or specifications and in accordance with the contract and the Contractor shall furnish to the Employer with all invoices, accounts, receipts and other vouchers to prove that the materials comply therewith. The Contractor shall at his own cost arrange for and/or carry out any test of any materials.
8. **Contractor's superintendence and representative on the works**: The Contractor shall give all necessary personal superintendence during the execution of the works and so long thereafter as the Employer may consider necessary until the expiration of the "Defects Liability Period" stated in the Appendix hereto. The contractor shall, also during the whole time the works are in progress employ a competent representative who shall be constantly in attendance at the works while the men are to work. Any directions, explanations, instructions or notice given by the Bank's Engineer to such representative shall be held to be given to the Contractor.
9. **Dismissal of workmen**: The Contractor shall on the request of the Bank's Engineer immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Bank's Engineer, be incompetent or misconduct himself and such persons shall not be again employed on the works without the permission of the Bank's Engineer.
10. **Access to works**: The Employer, shall at all reasonable times, have free access to the works and/or to the workshops, factories or other places where materials are lying or from which they are being obtained and the Contractor shall give every facility to the Employer necessary for Inspections and examination and test of the

materials and workmanship. No person not authorized by the Employer except the representatives of public authorities shall be allowed on the works at any time.

11. **Bank's Engineer**: The term Bank's Engineer shall mean the person appointed and paid by the Employer to inspect the works. The Contractor shall afford the Bank's Engineer every facility and assistance for inspecting the works and materials and for checking and measuring time and materials.

The Bank's Engineer, or the Employer shall have power to give notice to the Contractor or to his representative of non-approval or any work or materials and such work shall be suspended, or the use of such materials shall be discontinued. The work will from time to time be examined by the Assistant General Manager (Tech.) but such examination shall not in any way exonerate the Contractor from the obligation to remedy any defects which may be found to exist at a stage of the works or after the same is completed. Subject to the limitations of this clause the Contractor shall take instructions only from the Bank's Engineer.

12. **Assignment and Subletting**: The whole of the works included in the Contract shall be executed by the Contractor and the contractor shall not directly or indirectly transfer, assign or under-let the Contract or any part share thereof or any interest therein without the prior written consent of the Employer and not undertaking shall relieve the Contractor from the full and entire responsibility of the Contract or from active superintendence of the works during their progress.

13. No alteration, omission or variation shall vitiate this contract but in case the Bank's Engineer thinks proper at any time during the progress of the works to make any alterations in, or addition to, or omissions from the works or any alteration in the kind of quality of the materials to be used therein and shall give notice thereof in writing under his hand to the Contractor, the Contractor shall alter, add to, or omit from, as the case may be, in accordance with such notice, but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviation from any of the provisions of the Contract. Stipulations, specifications or Contract Drawings without the previous consent in writing of the Employer and the value of such extras alterations, additions or omission shall, in all cases, be determined by the Employer in accordance with the provisions of Clause 17 hereof, and the same shall be added to, or deducted from the Contract Amount, as the case may be accordingly.

14. **Schedule of Quantities**: The Schedule of quantities, unless otherwise stated shall be deemed to have been prepared in accordance with the Standard Method of Measurement.

Any error in description or in quantity or in omission of items from the schedule of quantities shall not vitiate this contract but shall be rectified and the value thereof, as ascertained under Clause 17 hereof, shall be added to, or deducted from the Contract Amount (as the case may be) provided that no rectification of errors, if any, shall be allowed in the Contractor's schedule of rates.

15. **Sufficiency of Schedule of Quantities**: The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the Schedule of Quantities and/or the schedule of rates and prices which rates and prices shall cover all his obligations under the contract, and all matters and things necessary for the proper completion of the works.

16. **Measurement of works**: The Bank's Engineer may, from time to time, intimate to the contractor that he requires the works to be measured, and the Contractor shall forthwith attend or send a qualified agent to assist Assistant Engineer in taking such measurements and calculations and to furnish all particulars or to give all assistance required by any of them.

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

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

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

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

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

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

The measurement and valuation in respect of the Contract shall be completed within the "period of final measurements" stated in the Appendix or if not stated then within six months of the completion of the Contract works as defined in Clause 21 hereof.

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

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

19. **Removal of improper work** : The Employer shall, during the progress of the works, have power to order in writing from time to time the removal from the works within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Bank's Engineer are not in accordance with the Specifications, the substitutions of proper materials, and the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the drawings &

specifications or instructions and the contractor shall forthwith carry out such order at his own cost. In case of default on the part of Contractor to carry out such order, the Employer shall have the power to employ any pay other persons to carry out the same; and all expenses consequent thereon, or incidental thereto, shall be borne by the Contractor, or may be deducted by the Employer from any moneys due, or that may become due, to the Contractor.

20. **Defects after virtual completion** : Any defect, shrinkage, settlement or other fault which may appear within the "Defects Liability Period" stated in the Appendix hereto, or, if none stated them within twelve months after the virtual completion of the works, arising in the opinion of the Employer from materials of workmanship not in accordance with the contract, shall upon the direction in writing of the Employer, and within such reasonable time as shall be specified therein, be amended and made good by the Contractor, at his own cost and in case of default the Employer may employ and pay other persons to amend and make good such defects, shrinkage settlements or other faults, and all damages loss and expenses consequent thereon are incidental thereto shall be made good and borne by the Employer or may be deducted by the Employer, upon the Bank's Engineer's Certificate in writing, from any money due or that may become due to the Contractor, or the Employer may in lieu of such amending and making good by the Contractor deduct from any money due to the Contractor a sum, to be determined by the

Employer equivalent to the cost of amending such work and in the event of the amount retained under clause 32 hereof being insufficient, recover the balance from the Contractor, together with any expenses the Employer may have incurred in connection therewith. Should any defective work have been done or materials supplied by any sub-contractor employed on the works

who has been nominated as provided under clause 12 and 22 hereof, the contractor shall be liable to make good in the same manner as if such work or material had been done or supplied by the Contractor and been subject to the provision of this clause 2 hereof. The contractor shall remain liable under the provisions of this clause the signing of any certificate or the passing of any accounts by the Employer.

21. **Certificate of virtual completion and defects liability period:** The works shall not be considered as completed until the Bank's Engineer has certified in writing that they have been virtually completed. The defects liability period shall commence from the date of such certificates.

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

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

(a) That the nominated sub-contractor shall indemnify the contractor against the same obligation in respect of the sub-contract as the contractor is under in respect of this contract.

(b) That the nominated sub-contractor shall indemnify the contractor against claims in respect of any negligence by the sub-contractors his servants or agents or any misuse by him or them or any scaffolding or other plant, the property of the Contractor or under any Workmen's Compensation Act in force.

(c) Payment shall be made to the nominated sub-contractor within fourteen days of his receipt of the Employer's Certificate provided that before any Certificate is issued the Contractor shall upon request furnish to

the Bank proof that all nominated sub-contractors accounts included in previous certificates have been duly discharged; in default whereof the Employer may pay the same upon a Certificate of the Bank and deduct the amount thereof from any sums due to the Contractor. The exercise of this power shall not create private of contract as between Employer and Sub-Contractor.

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

24. **Insurance in respect of damage to person and property:** The Contractor shall be responsible for all injury to persons, animals or things, and for all structural and decorative damage to property which may arise from the operation or neglect of himself or of any nominated sub-contractor or any employee of either, whether such injury or damage arises from carelessness accident or any other clause whatever in any connected with the carrying out of this Contract. This clause shall be held to include inter alia any damage to buildings, whether immediately adjacent or otherwise, and any damage to road, streets, foot-paths, bridges or ways as well as damage caused to the buildings and works forming the subject of this contract by frost, rain, wind or other inclemency of weather. The Contractor shall indemnify the Employer and hold it harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of any legislature or otherwise and also in respect of any award or compensation or damages consequent upon such claim.

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

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

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

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

The Employer shall be entitled to deduct the amount of any damage, compensation, costs, charges and expense arising of accruing from or in respect of any such claims or damage from any or all sums due or to become due to the Contractor without prejudice to the Employer's other rights in respect thereof. The Contractor shall at his own expense, arrange to effect and maintain (until the virtual completion of the contract) with an approved office the following insurance policies in the joint name of employer and himself with the employer being first (Principal) and deposit such policy or policies with the employer from time during the currency of this contract **and these policies to be submitted within 14 days of award of work or before start of the work at site whichever is earlier.**

1. (Contractor All Risk i.e., C.A.R. Policy) for the total amount of contract

2. Workmen compensation policy.

3. Third party liability policy with the limits as under

(a) Rs.5 lakh in respect of damage to property for any one accident or occurrence subject to an overall ceiling of Rs.10 lakh.

(b) Rs.2 lakh per person for any one accident or occurrence.

25. **Insurance:** The contractor shall, within 14 days from the date of commencement of the works, insure the works at his cost and keep them insured until the virtual completion of works, against loss or damage by fire with an office **in the joint names of the employer and the contractor (the name of the former being placed first in the policy) for the full amount of the contract.** Such policy shall cover the property of the "Employer" only. **The contractor shall deposit the policy and receipts for the premium with the employer within twenty-one days from the commencement of the works.** In default of the contractor, insuring as provided above, the employer may so insure the works and may deduct the premium paid from any moneys due or which may become due to the Contractor without prejudice to the other rights of the Employer in respect of such default. In case it becomes necessary to suspend the works, the Contractor shall as soon as the claim under the policy is settled, or the work reinstated by the Insurance Office, should they elect to do so, proceed with all due diligence with the completion of the works in same manner as though the fire had not occurred and in all respects under the same conditions of Contract. The Contractor in case of rebuilding or reinstatement after fire shall be entitled to such extension of time for completion as deems fit.

26. **Date of commencement and completion:** The Contractor shall be allowed admittance to the site on "Date of Commencement" stated in the Appendix hereto, or each later date as may be specified by the Employer and be shall thereupon and forthwith begin the works and shall regularly proceed with and complete the same (except such painting or other decorative work as the bank may desire to delay) or before the "Date of Completion" stated in the Appendix subject nevertheless to provisions for extension of time hereinafter contained.
27. **Damages for non-completion:** If the Contractor fails to complete the works by the date stated in the Appendix or within any extended time under Clause 26 and 20 here the Contractor shall pay the Employer the sum named in the Appendix as "Liquidated Damages" for the period during which the said works shall so remain incomplete and the Employer may deduct such damages from any money due to the Contractor.
28. **Delay and extension of time:** If in the opinion of the Employer the works be delayed(a) by force major or (b) by reason of any exceptionally inclement weather or c) by reason of proceedings taken or threatened by or dispute with adjoining or neighbouring owners or public authorities arising otherwise than through contractor's own default or (d) by the works or delays of other contractor or Tradesmen engaged or nominated by the Employer and not referred to in the schedule of quantities and/or specifications or (e) by reasons of Bank's Engineer instruction as per clause 17 hereof (f) by reason of civil commotion, local combination of workmen or strike or lockout affecting any of the building trades or (g) in consequence of the Contractor not having received in due time necessary instructions from the Bank for which he shall have specifically applied in writing or (h) from other causes which the Bank may certify as beyond the control of contractor or (I) in the event, the value of the work exceed the value of the Priced Schedule of Quantities owing to variation, the Bank may make a fair and reasonable extension of time for completion shall as soon as may be given written notice thereof to the bank but the Contractor shall nevertheless constantly use his endeavours to prevent delay and shall do all that may reasonably has required to the satisfaction of Bank to proceed with work.
29. **Contractor's failure to comply with Employers instruction:** If the Contractor after receipt of written notice from the Employer requiring compliance within 10 days fails to comply with such further drawings and/or Bank's instructions the Employer may employ and pay other persons to execute any such work whatsoever that may

be necessary to give effect thereto, and all costs incurred in connection therewith shall be recoverable from the Contractor by the Employer as a debt or may be deducted by him from any moneys due to the Contractor.

30. **Termination of Contract by the Employer**: If the Contractor being an individual or a firm commits any "act of insolvency" or shall be adjudged an insolvent or being an incorporated company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up voluntarily or subject to the supervisions of the court and the Official Assignee or the Liquidator in such acts of insolvency or winding up, as the case may be, shall be unable within seven days after notice to him requiring him to do so to show the reasonable satisfaction of the Architect that he is able to carry out and fulfil the Contract and to give security therefore, if so required by the Architect.

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

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

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

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

- (i) Has abandoned the Contract, or
- (ii) Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progresses of the works for fourteen days after receiving from the Bank notice to proceed or
- (iii) Has failed to proceed with the work with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or
- (iv) Has failed to remove materials from the site or to pull down and replace work for seven days receiving from the Bank written notice that the said materials

or work were condemned and rejected by the Bank's Engineer under these conditions' or

- (v) Has neglected or failed persistently to observe and perform all of any of the acts, matter or things by the Contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the Contractor requiring the Contractor to observe or perform the same.

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

Employer shall have been put to in procuring the works to be completed and the amount.

If any, owing the Contractor and the amount which shall be so certified shall thereupon be paid by the Employer to the Contractor or by the Contractor to the Employer, as the case may be, and the Certificate of the Bank shall be final and conclusive between the parties.

- 31. **Termination of Contract by Contractor**: If this payment of the amount payable by the Employer under Certificate of the Bank's Engineer shall be in arrears and

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

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

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

concealment relating to the works or materials or to any matter dealt with in the Certificate and in case of the all defects and insufficiencies in the works or materials which a reasonable examination would not have disclosed.

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

33. **Delayed Payment**: Any amounts payable by the Employer to the Contractor shall, if not paid within the 'period of honouring Certificates' names in the Appendix carry interest at the rate named in the Appendix as the "Rate of interest for delayed payment" from the date upon which sum ought to have been paid by the Employer until the payment.
34. The decision, opinion, direction Certificate (except for payment) with respect to all or any of the matters under Clauses 2(a,b), 4,5, 14, 20 (a,b,c,d and f) hereof (which matters are herein referred to as the excepted matters) shall be final and conclusive and binding on the parties hereto and shall be without appeal. Any other decision, opinion, direction, shall be subject to the right of Arbitration and review under the Clause 35 hereof in the same way in all respects (including the provisions as to opening the reference).
35. **Settlement of disputes by Arbitration**: All disputes and differences of any kind whatever arising out of or in connection with the contract or the carrying out of the works (whether during the progress of the works or after their completion and whether before or after the determination abandonment or breach of the contract) shall be referred to and settled by the Bank who shall state its decision in writing. Such decision may be in the form of a final certificate or otherwise. The decision of the Bank with respect to any of the excepted matters shall be final and without appeal as stated in Clause 33 hereof. But if either the Contractor be dissatisfied on any matter on which a decision is taken by the Bank as above, except any of the expected matter the Contractor may within 28 days after receiving notice of such decision give a written notice to the other party requiring that the matters in dispute be arbitrated upon. Such written notice shall specify the matters, which are in dispute or difference of which such written notice has been given. If both the parties agree, a single arbitrator would be appointed for the purpose. In case no agreement could be reached on the appointment of single arbitrator, both the parties will nominate one person each as an arbitrator on their behalf. The two arbitrators

nominated by the parties shall nominate one more person to act as third arbitrator or umpire.

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

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

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

This submission shall be deemed to be a submission to arbitration within the meaning of the Indian Arbitration and Conciliation Act, 1996 or any statutory modification thereof. The award of the arbitrator or Arbitrators, as the case may be, shall be final and binding on the parties. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or dispute being referred to arbitration, but shall proceed with the works with all due diligence and shall until the decision of the Arbitrator or Arbitrators, as the case may be, is given, abide by the decision of the Bank. No award of the Arbitrator or Arbitrators, as the case may be, shall relieve the Contractor of his obligations to adhere strictly to the Bank's instructions with regard to the actual carrying out of the works. The Employer and the Contractor hereby also agree that arbitration under this Clause

shall be a condition precedent to any right of action under the Contract. **Right of technical scrutiny of final bill**

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

Employer entitled to cover compensation paid to workman

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

Abandonment of works

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

Return of surplus materials

39. Notwithstanding anything to the contrary contained in any or all the clauses of this Contact, where any material for the execution of the Contract is procured with the assistance of the Employer by purchase made under orders or permits or licenses issued by Government, the Contractor shall hold the said materials economically and solely for the purpose of the Contract and not dispose of them without the prior written permission of the Employer and return it to the Employer, if required by the Employer, at the price to be determined by the Bank having due regard to the conditions of the materials, the price to be determined not be exceed

the purchase price thereof inclusive of sales tax, octroi and other such levies paid by the Contractor in respect thereof, in the event of breach of the aforesaid condition, the Contractor shall in addition to being liable to action for contravention of the terms of licenses or permit and/or criminal breach of trust, be liable to Employer for all moneys, advantages or profits resulting or which in the usual course would have resulted to his by reason of such breach.

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

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

Place:

Date:

Seal & Signature of the Tenderer.

Section H

Scope of work with technical details and list of approved makes

Description of Work:

1.1 SITC of Audio and Video System at Auditorium in the main office building at Reserve Bank of India (RBI), Hyderabad.

1.2 The scope of proposed work shall be supply, installation, testing and commissioning of Audio & Video system as per the layout plans/drawings, schedule of quantities and specifications given in this tender document.

1.3 Inspection of Equipment.

It shall be the Audio & Video System Integrator's duty to inspect all the equipment before incorporation in the works in regard to Audio & Video System. Any equipment, which are found to be unacceptable, shall be removed and replaced by the System Integrator's at his own expense.

Integration, Interoperability and Inter-Vendor Coordination:

1.4 End-to-End Audio & Video Integration: The successful Audio & Video System Bidder shall be fully responsible for the complete installation, commissioning and integration of the audio and video system. Furthermore, the Bidder is responsible for seamless integration with the Bank's additionally provided displays. This includes, but is not limited to, routing, switching, and capturing audio and video signals from all visual source endpoints, media players, laptops, video conferencing units, and digital interactive podiums, and processing them through the digital mixer/DSP and video switchers/extenders without latency or signal degradation.

1.5 Joint Testing and Commissioning: The contractor shall actively coordinate, collaborate, and share technical interface requirements with the Bank's parallel Display vendor handling the separate displays. The contractor must participate in joint testing sessions to ensure perfect Audio-Video Synchronization across the auditorium.

Existing Conduit Utilization and Mandatory Site Visit:

1.6 Utilization of Existing Infrastructure: The entire Audio & Video cabling network (including speaker cables, microphone lines, control cables etc.) must be laid strictly within the existing concealed conduits, raceways, floor trunks, and stage back-boxes currently available at the auditorium site.

1.7 Structural Integrity: The Contractor shall ensure that no existing acoustic cladding,

interior woodwork, or structural walls are damaged, chipped, or altered during the pulling of cables or mounting of speakers.

1.8 Mandatory Site Visit: Bidders are strictly advised and mandated to conduct a comprehensive physical site inspection of the auditorium prior to submitting their technical and commercial bids.

EXECUTION

Execution shall include all activities such as procurement, installation, erection, delivery of the equipment, application and workmanship required to implement the works within the framework of the contract. The Audio & Video System Integrator shall carry out everything necessary for the proper execution of the works shown and described in the Contract Documents or may reasonably be inferred there from. He shall report well in advance in writing to the Bank's Engineer regarding any and all conditions, which may affect the satisfactory execution of the works or endanger its permanency. The work shall be carried out strictly as per prevailing technical standards & regulations along with the applicable statutory norms applicable for the particular works.

WORKMANSHIP

All Workmanship shall be provided to the satisfaction of the RBI in the best and most modern available methods and workman like manner, and any work deemed by the RBI's not meeting the standards specified here under or in the Contract Documents shall be removed by the Audio & Video System Integrator and replaced so as to be in accordance with the approved standards, all at the Audio & Video System Integrator's expense. The Audio & Video System Integrator shall seek the Quality Certification of the work from the RBI at intermediate stages. No extensions would be given in the final completion time, on account of any faulty works done and the time required to redo / rectify the same.

PROGRESS AND TECHNICAL MEETINGS

The RBI shall conduct regular meetings, which must be attended by the Audio & Video System Integrator, in which the Audio & Video System Integrator shall report to the Bank's officials for his work progress and all other matters affecting the installation and commissioning of Audio & Video System. The content of the meeting shall be recorded in the form of minutes by RBI and by Audio & Video System Integrator.

DISTURBANCE

The Audio & Video System Integrator shall carry out the works with the minimum of noise and other disturbance to the other floor and other adjoining premises and occupants thereof.

Centralized Equipment Description.

1. Indoor Active LED Display System:

The proposed P1.8 mm or less indoor active LED display of size 11.54 feet (W) × 6.82 feet (H) is designed for installation on the auditorium stage to deliver high-resolution and immersive visual content. With a fine 1.8 mm pixel pitch or better, the display ensures sharp images and clear text visibility even from close viewing distances. It supports a high refresh rate of 7680 Hz, brightness of 700 cd/m², wide 160° horizontal and vertical viewing angles, adjustable colour temperature and high contrast ratio. The display shall have front IP54 protection, low power consumption and an LED lifetime of up to 100,000 hours. It should be ideal for presentations, cultural programs, conferences and multimedia performances. Complete supply, installation, configuration and commissioning with all required accessories shall be included. Technical specification shall be as per mentioned in the BOQ or Technical specification sheet.

2. All in One Controller:

The LED display controller is designed for reliable and high-performance signal processing for professional LED display systems. It supports multiple input ports including 2× HDMI, 1× DVI, and 1× USB, with standard input resolution up to 4K, 2K @60Hz. Also Supports Display Port 1.2 or 12G-SDI. For output, it features 6 Gigabit Ethernet, supports EDID Management, Ethernet and USB control ports, cascading support, and a 100–240V AC power input makes it suitable for auditorium and large LED installations. Technical specification shall be as per mentioned in the BOQ or Technical specification sheet.

3. Front Speakers (Passive Coaxial Loudspeaker)

Passive 10" Two-Way, Full-Range Point Source Loudspeakers designed for high-performance audio reproduction in auditorium environments. The speaker system shall feature a high-performance coaxial driver configuration comprising a 1 x 10" LF Driver and a 1 x 1" HF Driver to ensure single-point source radiation and complete wavefront coherency across all frequencies without polar lobing. Frequency Response of 60 Hz to 20 kHz, Power Rating of 130W AES (520W Peak), Nominal Impedance of 8 Ohms, Sensitivity of 95 dB or better, Maximum SPL of Peak 122 dB or better, Dispersion of 80° - 90° Conical, and an internal passive Crossover Frequency at 2.5 kHz. The cabinet shall be constructed from high-grade Birch Plywood finished in a black impact-resistant structured coating, featuring an acoustically

transparent perforated steel grill with foam backing. Complete with dedicated factory mounting brackets and all necessary installation hardware. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

4. Subwoofer

Dual 10" In-Wall Subwoofer Systems shall feature 2 x 10" LF drivers housed in an MDF direct radiator vented enclosure with a maximum enclosure depth of 300 mm to facilitate flush in-wall installation. Frequency Response of 40 Hz to 500 Hz, Power Rating of 450W AES (1800W Peak), Nominal Impedance of 4 to 8 Ohms, Sensitivity of 94 dB @ 1W/1m or better, Maximum SPL of Peak 127 dB @ 1m or higher, and Coverage Dispersion of 180° horizontal x 100° vertical @ 400Hz (offering up to 100° vertical control). Construction shall feature a black impact-resistant structured coating and an acoustically transparent black woven fabric grill. Complete all necessary mounting hardware and accessories required for installation. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

5. Two-Way Stage Monitor Loudspeaker

Passive 12" Two-Way, Full-Range Stage Monitor Loudspeakers designed for high-performance audio monitoring in auditorium and stage applications. The loudspeaker shall feature a high-performance coaxial arrangement comprising 1 x 12" LF driver and 1 x 1" HF driver, delivering single-point source radiation and consistent sound distribution. The system shall incorporate MVC (Multi-Vent Cooling) technology to allow handling of its nominal full power capacity reliably across all working positions. Technical specifications shall meet or exceed the following parameters: Frequency Response of 50 Hz to 20 kHz, Power Rating of 230W AES (920W Peak), Nominal Impedance of 8 Ohms, Sensitivity of 96 dB SPL (1W @ 1m) or better, Maximum SPL of Peak 120 dB SPL or better, and Coverage Dispersion of 50° to 60° Conical. Construction shall feature a Birch plywood vented enclosure coated in a black impact-resistant structured finish with an acoustically transparent MS grill. Complete with all necessary mounting and installation accessories as required. Technical specification shall be as per mentioned in the BOQ or Technical specification sheet.

6. Two-Way Control Room Speaker

Passive 10" Two-Way, Full-Range Control Room Speakers designed for accurate point source sound reinforcement. The speaker system shall feature a high-performance coaxial driver configuration comprising 1 x 10" LF Driver and 1 x 1" HF Driver to deliver smooth frequency response both on and off-axis with complete wavefront coherency. Frequency Response of

60 Hz to 20 kHz, Power Rating of 130W AES (520W Peak), Nominal Impedance of 8 Ohms, Sensitivity of 95 dB SPL (1W @ 1m) or better, Maximum SPL of Peak 122 dB SPL or better, Coverage Dispersion of 80° - 90° Conical, and an internal passive Crossover Frequency at 2.5 kHz. Construction shall consist of a Birch Plywood cabinet coated in a black impact-resistant structured finish, featuring an acoustically transparent perforated steel grill backed with foam. Complete with convenient mounting options, dedicated factory brackets, technical specification shall be as per mentioned in the BOQ or Technical specification sheet.

7. 6-Channel Power Amplifier

6-Channel Power Amplifiers designed for high-efficiency audio amplification in commercial and performance venue installations. The amplifier shall deliver a power output of $6 \times 300 \text{ W}$ @ 4 Ohms and $6 \times 200 \text{ W}$ @ 8 Ohms. Frequency Response of 30 Hz to 20 kHz, Total Harmonic Distortion + Noise (THD+N) of <0.01%, Intermodulation Distortion (IMD) of <0.02%, Signal to Noise Ratio of -95 dB, Damping Factor of >100 @ 8Ω, Crosstalk of -90 dB or better, Slew Rate of 50V/μs, Input Sensitivity of 1.3V RMS (+5dBu), Input Impedance of 20kΩ (balanced), and a Voltage Gain of 29 dB. The front panel shall feature a Power switch, Power/Protection indicator, Signal indicator, and Clip indicators, with Level controls provided on the rear panel. Cooling shall be forced air from front to side. The system shall incorporate comprehensive protection circuitry including Ultrasonic protection, Short circuit protection, Turn-on delay load protection, and DC fault protection. Complete with all necessary mounting hardware and connection accessories required for rack installation. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

8. 4- Channel Power Amplifier

4-Channel Power Amplifiers designed for high-efficiency audio amplification in commercial and performance venue installations. The amplifier shall deliver a power output of $4 \times 300 \text{ W}$ @ 4 Ohms and $4 \times 200 \text{ W}$ @ 8 Ohms. Frequency Response of 30 Hz to 20 kHz, Total Harmonic Distortion + Noise (THD+N) of <0.01%, Intermodulation Distortion (IMD) of <0.02%, Signal to Noise Ratio of -95 dB, Damping Factor of >100 @ 8Ω, Crosstalk of -90 dB or better, Slew Rate of 50V/μs, Input Sensitivity of 1.3V RMS (+5dBu), Input Impedance of 20kΩ (balanced), and a Voltage Gain of 29 dB or better. The front panel shall feature a Power switch, Power/Protection indicator, Signal indicator, and Clip indicators, with Level controls provided on the rear panel. Cooling shall be forced air from front to side. The system shall incorporate comprehensive protection circuitry including Ultrasonic protection, short circuit protection, Turn-on delay load protection, and DC fault protection. Complete with all necessary mounting

hardware and connection accessories required for rack installation. Technical specifications shall be as mentioned in the BOQ or Technical specification sheet.

9. 2-Channel Power Amplifier

2-Channel Power Amplifiers designed for high-efficiency audio amplification in commercial and performance installations. The amplifier shall deliver a power output of $2 \times 750 \text{ W @ } 4 \text{ Ohms}$ and $2 \times 500 \text{ W @ } 8 \text{ Ohms}$, with Bridged Mono Output Capability of $1800 \text{ W @ } 4 \text{ Ohms}$ and $1400 \text{ W @ } 8 \text{ Ohms}$. Frequency Response of 20 Hz to 20 kHz, Total Harmonic Distortion (THD) of 0.01%, Output Hum & Noise of -104 dB from full output, Damping Factor of $>200 @ 8\Omega$, Crosstalk of -90 dB or better, Slew Rate of $50\text{V}/\mu\text{s}$, Input Impedance of $20\text{k}\Omega$ (balanced), and a Voltage Gain of 34 dB or better. Rear panel shall feature dedicated Level controls. Cooling shall be forced air from front to rear. The system shall incorporate comprehensive protection circuitry including Ultrasonic protection, Short circuit protection, Turn-on delay, DC fault protection, and Ultrasonic limiting. Complete with all necessary mounting hardware and connection accessories required for rack installation. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

10. Digital Wireless Quad Receiver

Digital Wireless Quad Receiver operates in the 2.4 GHz digital frequency band for professional audio performance. The receiver unit shall support up to 4 simultaneous channels. Dynamic Range of 120 dB, Total Harmonic Distortion (THD) of $< 0.05\%$, Frequency Response of 20 Hz to 20 kHz, System Latency of 2.8 ms (Standard mode) / 6.7 ms (High Density mode), and security featuring AES-128 bit encryption. Complete with half-rack/full-rack mounting hardware, antennas, power supply, and connection accessories as required. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

11. Digital Wireless Handheld Microphone

Handheld Digital Wireless Microphone Transmitter operating in 2.4 GHz frequency band with GFSK modulation, 24-bit/48 kHz digital audio transmission, true-diversity antenna technology, integrated dynamic hyper cardioid microphone capsule, AES-128 encrypted wireless communication, OLED display for status indication, slide-to-mute function, powered by $2 \times \text{AA}$ batteries, complete with all required accessories and suitable for professional.

12. Digital Wireless Lavalier Microphone

Digital Wireless Handheld Transmitters operates in the 2.4 GHz band with GFSK modulation

for professional audio transmission. The transmitter shall deliver 24-bit/48 kHz uncompressed digital audio quality and feature a true-diversity antenna system for reliable signal reception and integrated dynamic hyper cardioid microphone capsule, AES-128 bit encryption for secure transmission, high-contrast OLED display for real-time status monitoring, dedicated slide-to-mute function, and powering via 2 × AA batteries. Complete with mic clip, color ID rings, and carrying pouch as required. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

13. Digital Wireless Gooseneck Microphone

Digital Wireless Gooseneck Microphone Systems featuring a desktop/tabletop transmitter operating in the 2,402 – 2,480 MHz frequency band for conference and presentation applications. The system shall support a minimum of 10 simultaneous channels in Standard mode and 20 simultaneous channels in HD mode and Audio Sampling Rate of 24-bit / 48 kHz across all modes, System Frequency Response of 20 Hz to 20 kHz or better, Dynamic Range of ≥120 dB (A-weighted, typical), Harmonic Distortion of <0.05% (typical), Latency of ≤3 ms in Standard mode and ≤7 ms in HD mode, and AES-128 bit (or equivalent) encryption for secure wireless transmission. The included microphone unit shall be a condenser gooseneck microphone with a cardioid polar pattern, length of approximately 480 mm, microphone frequency response of 30 Hz to 20 kHz or better, and Maximum SPL handling of ≥139 dB SPL. The base transmitter shall feature a selectable mute operation including touch-to-talk / touch-to-mute functions and a standard 3-pin XLRM microphone output connection. Complete with wind screen, power supply, and all essential mounting/connection accessories as required. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

14. 2-Bay Charging Station

2-Bay Desktop / Tabletop Charging Stations designed to charge rechargeable NiMH battery packs used in wireless microphone system transmitters and receivers. The charging station shall feature a minimum charging capacity to simultaneously charge at least 2 transmitters or receivers. and Input Power rating of 12 V DC, 3 A, individual LED status indicators for power and charging feedback per bay, and an operating temperature range of 0°C to 40°C or better. The unit shall be fully compatible with the wireless microphone transmitters and receivers offered. Complete with external power supply adapter, power cable, and all necessary connection accessories as required. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

15. Digital Signal Processor

Digital Signal Processors designed for professional (DSP) audio matrix routing, mixing, and processing. The system shall feature a minimum of 8 Analog Inputs × 8 Analog Outputs and be Dante-enabled with minimum 4 × 4 network audio channels. Technical specifications shall meet or exceed the following parameters: 24-bit A/D and D/A conversion at 48 kHz sampling frequency, 32-bit floating-point DSP processing or better, Input Impedance of $\geq 10\text{ k}\Omega$ (balanced), Output Impedance of $\leq 200\text{ }\Omega$ (balanced), individually selectable +48 V Phantom Power per input, Crossover Range of approx. 20 Hz – 20 kHz, Frequency Response of 20 Hz – 20 kHz or better, and Total Harmonic Distortion (THD) of $\leq 0.01\%$. The unit shall feature built-in automatic mixing functionality, advanced Acoustic Processing (including Acoustic Feedback Control, Noise Control, and Echo Control), Dynamic Processing (Compressor, AGC, and Limiter on each channel), Minimum 31-band PEQ per input, and Minimum 10-band PEQ per output. Control interfaces shall include RJ45, USB, RS232, RS485, and GPIO. Complete with rack-mounting hardware, power cables, control software, and configuration accessories as required. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

16. Digital Audio Mixing Console

Digital Audio Mixing Console designed for live sound reinforcement, broadcast, and installed audio applications. The console shall support a minimum processing capacity of 16 Mono + 1 Stereo + 2 FX Return channels and feature an integrated minimum 9-inch multi-touch colour display interface. Physical connectivity shall include a minimum of 16 Mic/Line analog inputs via XLR and XLR/TRS combination connectors, and a minimum of 8 balanced XLR analog outputs. The console shall be equipped with built-in or expandable network audio support for a minimum 16 × 16 Dante I/O interface Selectable. 48 kHz / 96 kHz sampling rate, 32-bit floating-point DSP processing or better, Frequency Response of 20 Hz to 20 kHz (+0.5/-1.0 dB or better), Total Harmonic Distortion (THD) of $\leq 0.01\%$, Dynamic Range of $\geq 106\text{ dB}$, and Signal Delay/Latency of $\leq 1.3\text{ ms}$. Power shall be supplied via an external AC adapter (100–240 V AC, 50/60 Hz) with a power consumption of approximately 43 W or better. The unit shall support desktop operation with rack-mount kit provision option, operating within a temperature range of 0–40°C. Complete with power cable, power adapter, and all necessary connection accessories as required. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

17. HDMI Distribution Amplifier / Splitter

HDMI Distribution Amplifiers / Splitters designed for ultra-high-definition audio/video distribution in professional AV setups. The unit shall feature a minimum of 2 × HDMI Type-A inputs and 8 × HDMI Type-A outputs, supporting HDMI 2.0b or better specifications with video bandwidth of minimum 18 Gbps. Maximum Video Resolution up to 4K UHD @ 60 Hz (4:4:4, 8-bit), HDR support, HDCP 2.2 compliance, and audio de-embedding via balanced/line-level L/R analog audio output and Optical S/PDIF digital audio output. The device shall support automatic and manual input switching, controlled via front-panel push buttons, RS-232 serial control interface (DB9 or equivalent), and TCP/IP network connection via 10/100 Ethernet RJ45 port. Signal transmission shall be optimized for 4K60 operation over high-speed HDMI cables. Power supply shall operate on 100–240 V AC, 50/60 Hz with an external DC adapter, consuming ≤15 W power. Complete with rack-mounting hardware, power adapter, and all necessary connection accessories. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

18. HD Base Wall-Plate Extender Set

HDMI over HD Base T Wall-Plate Extender Sets designed for uncompressed ultra-high-definition video and audio transmission over long distances. The set shall consist of 1 × Wall-Plate Transmitter and 1 × Receiver unit operating over a single Cat6/Cat6A twisted-pair cable utilizing HD Base T technology. The transmitter unit shall provide a minimum of 1 × HDMI Type-A input, and the receiver unit shall provide a minimum of 1 × HDMI Type-A output. HDMI standard 1.4b or better, HDCP 2.2 compliance, video bandwidth of minimum 10.2 Gbps, and maximum resolution support up to 4K UHD. The extender set shall support transmission distances up to 40 meters for 4K@60 Hz (4:2:0) / 4K@30 Hz (4:4:4) video formats and up to 70 meters for Full HD 1080p video formats. The transmitter shall feature a wall/flush mounting design complete with a suitable Decora/faceplate cover plate. The system shall operate within a temperature range of 0°C to 40°C or better, powered by an external AC adapter (100–240 V AC, 50/60 Hz) with total power consumption of ≤10 W. Complete with mounting hardware, cover plate, power supply, and all essential accessories. Technical specification shall be as per mentioned in the BOQ or Technical specification sheet.

19. HDMI Extender Set

HDMI over HD Base T Extender Sets consisting of 1 × Transmitter and 1 × Receiver designed to extend high-definition audio and video signals over a single shielded Cat6/Cat6A cable. Physical connectivity shall provide a minimum of 1 × HDMI input on the transmitter and 1 ×

HDMI output on the receiver. HDMI 2.0 or higher compliance, HDCP 2.2 support, minimum video bandwidth of 18 Gbps, and video resolution support up to 4096 × 2160 @ 60 Hz with 4:4:4 colour sampling. Signal transmission distance shall be not less than 40 meters for 4K UHD signals and 70 meters for 1080p signals. The units shall feature diagnostic LED indicators for power, link, and signal status monitoring. The equipment shall operate on 100–240 V AC, 50/60 Hz power input via the supplied external power adapter, with maximum power consumption not exceeding 13 W. Complete with power supplies, mounting hardware, interconnection accessories. Technical specification shall be as per mentioned in the BOQ or Technical specification sheet.

20. High-Speed HDMI Cable with Ethernet (6 ft / 1.83 m)

High-Speed HDMI Cables with Ethernet designed for high-performance audio and video signal interconnections. The cable shall have a nominal length of 6 ft (approx. 1.83 m) and be terminated with HDMI Type-A Male connectors on both ends featuring gold-plated contact surfaces for optimal signal transfer and corrosion resistance. HDMI 2.0 / Premium High-Speed HDMI standard or better, minimum bandwidth of 18 Gbps, maximum video resolution up to 4K UHD @ 60 Hz, 4:4:4 chroma subsampling, HDR support, HDCP 2.2 or better compliance, and full support for all standard multi-channel digital HDMI audio formats. Complete with strain relief booting and proper cable management accessories as required for integration. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

21. Category 6A F/UTP Shielded LAN Cable

Category 6A F/UTP Shielded LAN Cables designed for high-speed voice, data, video, audio, and HDBaseT signal transmission. The cable shall feature 4 twisted pairs of 23 AWG solid bare copper conductors with HDPE insulation, a central cross-separator, and an overall aluminum foil shield for protection against EMI and alien crosstalk. Technical specifications shall include operational bandwidth up to 500 MHz, compliance with ANSI/TIA-568 Cat 6A standards, support for 10GBASE-T data rates up to a 90 m permanent link length, IEEE 802.3af/at/bt PoE support, and a low-smoke / lead-free FR-PVC flame-retardant outer sheath. Complete with termination, labeling, strain relief, cable management, and testing. Technical specification shall be as per mentioned in the BOQ or Technical specification.

22. Cables, Connectors & Cabling Accessories

Professional-grade audio, video, control, and network cables, connectors, rigid PVC conduits, and containment accessories required for complete system integration. it shall include low-

capacitance 22–24 AWG 2-core/2-pair balanced shielded audio cables for mic/line signals, 2-core stranded copper speaker cables (minimum 1.5 sq. mm / 2.5 sq. mm) for 70/100 V and low-impedance speaker systems, and High-Speed/Premium High-Speed HDMI cables supporting minimum 18 Gbps bandwidth, 4K @ 60 Hz, HDR, HDCP 2.2, ARC, and CEC. Complete with professional-grade XLR, TRS, RCA, and Euro block connectors, cable management hardware (cable ties, Velcro straps, labels, glands, clips), and minimum 20 mm rigid PVC conduits with bends, elbows, couplers, junction/inspection boxes, saddles, and mounting accessories for a fully functional installation. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

23. Floor-Standing Equipment Rack

19-inch floor-standing network/AV equipment rack equipped with lockable toughened glass/acrylic or perforated metal front door, lockable steel rear door, removable side panels, top/bottom cable entry, and a minimum of 4 heavy-duty castor wheels with locking arrangements. The enclosure shall include top-mounted air circulation fan modules delivering a minimum total airflow of 180 CFM, a 1U 19-inch horizontal cable manager, fixed equipment shelves, and a 2U 19-inch rack-mountable single-phase Power Distribution Unit (PDU) rated for minimum 8 A with overload protection and at least 12 × Indian round-pin 5 A sockets. Complete with vertical/horizontal cable routing provisions, mounting hardware, cage nuts, screws, and accessories. Technical specifications shall be as per mentioned in the BOQ or Technical specification sheet.

Technical specification shall be as per mentioned in the BOQ.

Place:

Signature of Contractor

Date:

Name and designation:

Name of firm with Seal:

Section - I

Checklist of Technical Details (to be filled up by the bidder and upload along with Part-I of tender documents)

1. Indoor Active LED Display				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
1.1	LED Display Size	11.54 feet (width) X 6.82 feet (Height) = 78.7 Sq. feet, Diagonal Size: 163 inches; 16:9 Aspect Ratio		
1.2	Pixel Pitch	1.8 mm or less		
1.3	Pixel density	289050 dots/m ² or higher		
1.4	LED Type	Fully Flip Chip COB		
1.5	Module Size	320X160 mm		
1.7	Ingress Protection	Front: IP54		
1.8	Brightness	≥ 700 cd/m ²		
1.9	Brightness Control	Manual/automatic		
1.10	Colour Temperature	1000K-9500K Adjustable or higher		
1.11	Horizontal Viewing Angle	≥ 160°		
1.12	Vertical Viewing Angle	≥ 160°		
1.13	Contrast Ratio	Minimum 10000:1		
1.14	Input Power <Max>	285 W/m ²		
1.15	Input Power < Typical>	130 W/m ²		
1.16	Refresh Rate	≥ 7680 Hz		
1.17	Input Power Frequency	50-60Hz or more		
1.18	LED lifetime hours	1,00,000 Hours		
1.19	Installation & Commissioning	Complete supply installation with all accessories		
1.20	Approved Makes	LG, Samsung, Delta, Indotronix Innovation, Xtreme Media or Equivalent		
1.21	Bid Specific OEM Authorization	Required		

2. All in One LED Controller				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
2.1	Type	2-in-1 LED Display Controller		
2.2	Inputs	2xHDMI, 1x DVI/DP Port, 1x USB and Optional Display Port 1.2 or 12G-SDI		
2.3	Input Resolution	Support up to 4K × 2K @ 60 Hz		
2.4	Ethernet Ports	Minimum of 6 x 1/10/100/1000 Gigabit Ethernet		
2.5	Fiber Interface	Minimum 2 × optical fiber interfaces		
2.6	Cascading	Shall support controller cascading/loop-back functionality for system expansion and redundancy		
2.7	EDID Management	Shall support EDID management/configuration for connected video sources		
2.8	Control	Multiple control methods shall be supported through suitable software/hardware interfaces		
2.9	Power Supply	100–240 VAC, 50/60 Hz or suitable universal AC power input		
2.10	Accessories	All required power cables, communication cables, software and standard accessories shall be supplied		
2.11	Compliance	Equipment shall comply with applicable CE/RoHS		
2.12	Approved Makes	Same OEM Controller		
2.13	Bid Specific OEM Authorization	Required		

3. Front Speakers				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
3.1	Type	Passive 2-Way full-range coaxial point-source loudspeaker		
3.2	Frequency Response	60 Hz – 20 kHz or better		
3.3	Low Frequency Driver	10" (250 mm) Low-Mid driver with coaxial entry or more		

3.4	High Frequency Driver	1 " (25 mm) voice coil compression driver mounted coaxially		
3.5	Power Rating	150W AES, 600W peak or higher		
3.6	Nominal Impedance	8 Ohms		
3.7	Sensitivity	Minimum 95 dB @ 1W/1m or more		
3.8	Maximum SPL	118dB continuous, 124dB peak @ 1m or better		
3.9	Dispersion	90° conical or better / equivalent uniform coverage		
3.10	Crossover	2.5kHz Passive, low loss air core inductors and MKP capacitors		
3.11	Connector	2 x Speakon		
3.12	Approved Makes	Martin Audio, L-Acoustic, Pulz, K-array, Yamaha, Genelac ,Procella Audio or Equivalent		
3.13	Bid Specific OEM Authorization	Required		

4. Dual 10" In-Wall Subwoofer System				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
4.1	Type	Professional passive in-wall / on-wall subwoofer system		
4.2	Frequency Response	38 Hz to 500 Hz or better		
4.3	Power Rating	500W AES, 2000W peak or higher		
4.4	Nominal Impedance	4Ω		
4.5	Sensitivity	95.5dB @ 1W/1m or more		
4.6	Maximum SPL	122dB continuous, 128dB peak @ 1m or more		
4.7	Dispersion	170° horizontal, 90° vertical @ 400Hz or better		
4.8	Transducers	2 x 10" (250 mm) long throw weather resistant woofer		
4.9	Cabinet Material	Minimum 18 mm MDF or high-grade birch plywood		
4.10	Approved Makes	Martin Audio, L-Acoustic, Pulz, Klipsch, Yamaha, QSC, JBL Professional or Equivalent		

4.11	Bid Specific OEM Authorization	Required		
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5. Passive 12" Stage Monitor Loudspeaker				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
5.1	Type	Passive 2-Way full-range coaxial point-source loudspeaker		
5.2	Frequency Response	55 Hz – 20 kHz or better		
5.3	LF Driver	12" Coaxial LF driver, 1" (coaxially mounted HF compression driver		
5.4	HF Driver	1" exit compression driver, coaxially mounted		
5.5	Power Rating	250W AES, 1000W peak or higher		
5.6	Nominal Impedance	8Ω		
5.7	Sensitivity	98 dB @ 1W/1m or better		
5.8	Maximum SPL (Continuous)	122 dB continuous @ 1m or more		
5.9	Dispersion	60° Conical or better		
5.10	Crossover	Passive 2-way crossover		
5.11	Connector	2 x Speakon connector		
5.12	Approved Makes	Martin Audio, L-Acoustic, Pulz, Klipsch, Yamaha, QSC, JBL Professional or Equivalent		
5.13	Bid Specific OEM Authorization	Required		

6. Passive 10" Control Room Monitor Speaker				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
6.1	Type	Passive 2-way coaxial cinema surround loudspeaker		
6.2	Frequency Response	65 Hz – 20 kHz or better		
6.3	Low Frequency Driver	10" (250 mm) Low-Mid driver with coaxial entry		
6.4	High Frequency Driver	1" (25 mm) voice coil compression driver mounted coaxially		
6.5	Power Rating	150W AES, 600W peak		

6.6	Nominal Impedance	8Ω		
6.7	Sensitivity	96 dB @ 1W/1m or better		
6.8	Maximum SPL	118dB continuous, 124dB peak @ 1m or more		
6.9	Crossover Frequency	Approximately 2.5 kHz		
6.10	Dispersion	90° conical		
6.11	Connector	2 x Speakon connector		
6.12	Approved Makes	Martin Audio, L-Acoustic, Pulz, Klipsch, Yamaha, QSC, JBL Professional or Equivalent		
6.13	Bid Specific OEM Authorization	Required		

7. 6-Channel Professional Power Amplifier				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
7.1	No. of Channels	6 or more		
7.2	Output Power (per channel)	Minimum 6 x 200W RMS @ 8 Ohms, 6 x 300W RMS @ 4 Ohms or more		
7.3	Frequency Response	30 Hz – 20 kHz or better		
7.4	Performance	THD + Noise <0.01% or better, Intermodulation Distortion <0.02% or better, S/N Ratio ≥ 95 dB or better		
7.5	Damping factor	>100 @ 8Ω		
7.6	Crosstalk	≤ -90 dB		
7.7	Slew Rate	≥ 50 V/μs		
7.8	Input Sensitivity	Approximately 1.3V RMS (+5dBu)		
7.9	Input Impedance	20kΩ, balanced or better		
7.10	Voltage Gain	Approximately 29dB		
7.11	Bandwidth	≥100 kHz		
7.12	Power requirement	230 –240V AC, 50Hz –60Hz		
7.13	Protection	Short circuit, thermal overload, DC fault with delayed turn-on load protection		
7.14	Inputs/Outputs	Balanced audio input for each channel and Professional NL4 Speakon outputs		

7.15	Approved Makes	Martin Audio, Powersoft, L-Acoustic, Pulz, Klipsch, NEXO, Lab Gruppen, QSC or Equivalent		
7.16	Bid Specific OEM Authorization	Required		

8. 4-Channel Professional Power Amplifier				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
8.1	No. of Channels	4 channels or more		
8.2	Output Power (per channel)	Minimum 4 x 200W RMS @ 8 Ohms, 4 x 300W RMS @ 4 Ohms or more		
8.3	Frequency Response	30 Hz – 20 kHz or better		
8.4	Performance	THD + Noise <0.01% or better, Intermodulation Distortion <0.02% or better, S/N Ratio ≥ 95 dB or better		
8.5	Damping factor	>100 @ 8Ω		
8.6	Crosstalk	≤ -90 dB		
8.7	Slew Rate	≥ 50 V/μs		
8.8	Input Sensitivity	Approximately 1.3V RMS (+5dBu)		
8.9	Input Impedance	20kΩ, balanced or better		
8.10	Voltage Gain	Approximately 29dB		
8.11	Bandwidth	100kHz		
8.12	Protection	Short circuit, ultrasonic/RF and thermal protection		
8.13	Load Protection	Turn-on delay and DC fault protection		
8.14	Subsonic filter	30Hz or 100Hz selectable or equivalent		
8.15	Power requirement	230 –240V AC, 50Hz –60Hz		
8.16	Inputs/Outputs	Balanced Phoenix/Euroblock inputs and NL4 Speakon outputs or equivalent		
8.17	Approved Makes	Martin Audio, Powersoft, L-Acoustic, Pulz, Klipsch, NEXO, Lab Gruppen, QSC or Equivalent		
8.18	Bid Specific OEM Authorization	Required		

9. 2-Channel Subwoofer Power Amplifier
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Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
9.1	No. of Channels	2 channels or more		
9.2	Power Output (per channel)	Minimum 2 x 500W RMS @ 8 Ohms, 2 x 750W RMS @ 4 Ohms or more		
9.3	Bridge Output	Minimum 1400W @ 8 Ohms, 1800W @ 4 Ohms or more		
9.4	Frequency Response	20 Hz – 20 kHz, ± 0.2 dB or better		
9.5	THD	$\leq 0.05\%$, 20 Hz–20 kHz at rated power		
9.6	IMD	$\leq 0.01\%$ or better		
9.7	Signal-to-Noise / Hum & Noise	≥ 105 dB or better		
9.8	Damping Factor	≥ 200 @ 8 Ω		
9.9	Input Sensitivity	Approximately 1.3 V RMS or better		
9.10	Bandwidth	≥ 100 kHz		
9.11	Slew Rate	≥ 50 V/ μ s		
9.12	Rise Time	≤ 2 μ s		
9.13	Input Impedance	≥ 20 k Ω , balanced		
9.14	Cooling	Forced-air cooling, front-to-rear		
9.15	Power	230 - 240 VAC, 50-60 Hz		
9.16	Protection	Short-circuit, thermal, DC fault, ultrasonic/RF and overload protection		
9.17	Approved Makes	Martin Audio, Powersoft, L-Acoustic, Pulz, Klipsch, NEXO, Lab Gruppen, QSC or Equivalent		
9.18	Bid Specific OEM Authorization	Required		

10. Digital Signal Processor (DSP)				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
10.1	System Type	Digital Signal Processor		
10.2	Analog I/O	Minimum 8 Analog Inputs $\times$ 8 Analog Outputs		
10.3	Network Audio	Dante-enabled, minimum 4 $\times$ 4 network audio channels		
10.4	A/D & D/A	24-bit		
10.5	Sampling Frequency	48 kHz		

10.6	DSP	32-bit floating-point DSP or better		
10.7	Input Impedance	≥10 kΩ balanced		
10.8	Output Impedance	≤200 Ω balanced		
10.9	Phantom Power	48 V, individually selectable per input		
10.10	Crossover Range	Approx. 20 Hz–20 kHz		
10.11	Automatic Mixer	Built-in automatic mixing functionality		
10.12	Frequency Response	20 Hz–20 kHz or better		
10.13	THD	≤0.01%		
10.14	Acoustic Processing	Acoustic Feedback Control, Noise Control and Echo Control		
10.15	Dynamic Processing	Compressor, AGC and Limiter on each channel		
10.16	Input EQ	Minimum 31-band PEQ per input		
10.17	Output EQ	Minimum 10-band PEQ per output		
10.18	Control Interfaces	RJ45, USB, RS232, RS485 and GPIO		
10.19	Approved Makes	Martin Audio, Ashly, Symetrix, L-Acoustic, Pulz, Klipsch, Yamaha, QSC or Equivalent		
10.20	Bid Specific OEM Authorization	Required		

11. Digital Mixing Console				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
11.1	System Type	Digital Audio Mixing Console		
11.2	Channels	Minimum 16 Mono + 1 Stereo + 2 FX Return		
11.3	Display	Minimum 9-inch multi-touch colour display		
11.4	Analog Inputs	Minimum 16 Mic/Line inputs		
11.5	Input Connectors	XLR and XLR/TRS combination connectors		
11.6	Analog Outputs	Minimum 8 balanced XLR outputs		
11.7	Dante	Minimum 16 × 16 Dante network audio I/O		
11.8	Sampling Rate	48 kHz / 96 kHz		
11.9	Processing	32-bit floating-point DSP or better		

11.10	Frequency Response	20 Hz–20 kHz, +0.5/-1.0 dB or better		
11.11	THD	≤0.01%		
11.12	Dynamic Range	≥106 dB		
11.13	Signal Delay	≤1.3 ms		
11.14	Power Supply	External AC adapter, 100–240 V AC, 50/60 Hz		
11.15	Power Consumption	Approximately 43 W or better		
11.16	Mounting	Desktop; rack-mount kit provision preferred		
11.17	Operating Temperature	0–40°C		
11.18	Approved Makes	Xilica, Yamaha, Allen & Heath, Behringer, Lawo, Midas, Bose or Equivalent		
11.19	Bid Specific OEM Authorization	Required		

12. Digital Wireless Quad Receiver				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
12.1	Type	Digital Wireless Microphone		
12.2	Receiver Capacity	Minimum 4 independent wireless mic receiving channels within a single 1U chassis unit or more		
12.3	Display	LCD/LED display showing channel, RF and audio status		
12.4	Operational Frequency Band	2,402~2,480MHz		
12.5	Dynamic Range	≥120 dB, A-weighted, typical or better		
12.6	Harmonic Distortion	<0.05%, typical or better		
12.7	Simultaneous Channels	Standard: 10 channels, HD mode: 20 channels.		
12.8	Frequency Response	20 Hz – 20 kHz or better		
12.9	Latency	≤ 3 ms in Standard mode and ≤ 7 ms in HD mode or better		
12.10	Audio Sampling Rate	Standard: 24bit/48kHz HD mode: 24bit/48kHz or better		
12.11	Encryption	AES-128 or equivalent		
12.12	Approved Makes	Shure, Sennheiser, Audio-Technica or equivalent		
12.13	Bid Specific OEM Authorization	Required		

13. Digital Wireless Handheld Microphone				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
13.1	Type	Digital Wireless Handheld Microphone		
13.2	Operating Frequencies	2,402~2,480MHz		
13.3	Dynamic Range	≥ 120 dB, A-weighted, typical or better		
13.4	Harmonic Distortion	< 0.05%, typical or better		
13.5	Simultaneous Channels	Minimum 10 channels in Standard mode, 20 channels in HD mode or more		
13.6	Frequency Response	20 Hz to 20 kHz or better		
13.7	Latency	≤ 3 ms in Standard mode, ≤ 7 ms in HD mode or better		
13.8	Audio Sampling Rate	24-bit / 48 kHz across Standard and HD modes or better		
13.9	Encryption	AES-128 or equivalent		
13.10	Approved Makes	Shure, Sennheiser, Audio-Technica or equivalent		
13.11	Bid Specific OEM Authorization	Required		

14. Digital Wireless Lavalier Microphone				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
14.1	System Type	Digital Wireless Body-Pack Microphone System		
14.2	Transmitter Type	Body-Pack / Belt-Pack Digital Wireless Transmitter		
14.3	Operating Frequencies	2,402 MHz to 2,480 MHz		
14.4	Dynamic Range	≥ 120 dB, A-weighted, typical or better		
14.5	Harmonic Distortion	< 0.05%, typical or better		
14.6	Simultaneous Channels	Minimum 10 channels in Standard mode, 20 channels in HD mode or more		
14.7	Frequency Response	20 Hz to 20 kHz or better		
14.8	Latency	≤ 3 ms in Standard mode, ≤ 7 ms in HD mode or better		

14.9	Audio Sampling Rate	Standard: 24bit/48kHz HD mode: 24bit/48kHz		
14.10	Encryption	AES-128 or equivalent		
14.11	Microphone Type	Miniature Lavalier Condenser Microphone		
14.12	Polar Pattern	Cardioid		
14.13	Microphone Cable	Approximately 1.4 m permanently attached cable		
14.14	Microphone Connector	Locking 4-pin connector compatible with body-pack transmitter		
14.15	Controls	Power, mute and system/channel controls		
14.16	Approved Makes	Shure, Sennheiser, Audio-Technica or equivalent		
14.17	Bid Specific OEM Authorization	Required		

15. Digital Wireless Gooseneck Microphone				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
15.1	System Type	Digital Wireless Gooseneck Microphone System		
15.2	Transmitter Type	Desktop / Tabletop Wireless Transmitter		
15.3	Operating Frequencies	2,402 MHz to 2,480 MHz		
15.4	Dynamic Range	≥ 120 dB, A-weighted, typical or better		
15.5	Harmonic Distortion	< 0.05%, typical or better		
15.6	Simultaneous Channels	Minimum 10 channels in Standard mode, 20 channels in HD mode or more		
15.7	Frequency Response	20 Hz to 20 kHz or better		
15.8	Latency	≤ 3 ms in Standard mode, ≤ 7 ms in HD mode or better		
15.9	Audio Sampling Rate	Standard: 24bit/48kHz HD mode: 24bit/48kHz		
15.10	Encryption	AES-128 or equivalent		
15.11	Microphone Type	Condenser Gooseneck Microphone		
15.12	Polar Pattern	Cardioid		
15.13	Microphone Length	Approximately 480 mm		
15.14	Microphone Frequency Response	30 Hz – 20 kHz or better		

15.15	Maximum SPL	≥139 dB SPL		
15.16	Mute Function	Selectable mute operation, including touch-to-talk/touch-to-mute		
15.17	Output Connection	3-pin XLRM microphone connection		
15.18	Approved Makes	Shure, Sennheiser, Audio-Technica or equivalent		
15.19	Bid Specific OEM Authorization	Required		

16. Charging Station				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
16.1	System Type	2-bay charging station		
16.2	Charging Capacity	Minimum 2 transmitters/receivers simultaneously		
16.3	Battery Type	Rechargeable NiMH batteries		
16.4	Input Power	12 V DC, 3 A		
16.5	Charging Indication	Individual LED indication for power and charging status		
16.6	Operating Temperature	0°C to 40°C or better		
16.7	Compatibility	Compatible with the proposed wireless microphone transmitter/receiver system		
16.8	Mounting	Desktop/tabletop charging station		
16.9	Approved Makes	Shure, Sennheiser, Audio-Technica or equivalent		
16.10	Bid Specific OEM Authorization	Required		

17. HDMI Distribution Amplifier				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
17.1	System Type	HDMI Distribution Amplifier / Splitter		
17.2	HDMI Inputs	Minimum 2 × HDMI inputs		
17.3	HDMI Outputs	Minimum 8 × HDMI outputs		
17.4	HDMI Version	HDMI 2.0b or better		
17.5	Video Bandwidth	Minimum 18 Gbps		
17.6	Maximum Resolution	Up to 4K UHD @ 60 Hz, 4:4:4, 8-bit		
17.7	HDR	HDR support		

17.8	HDCP	HDCP 2.2 compliant		
17.9	Switching	Auto and manual input selection		
17.10	Input Selection	Front-panel control, RS-232 and TCP/IP		
17.11	Analog Audio Output	Balanced/line-level L/R output		
17.12	Digital Audio Output	Optical S/PDIF		
17.13	Network	10/100 Ethernet via RJ45		
17.14	RS-232	DB9 or equivalent serial control interface		
17.15	HDMI Connector	HDMI Type-A		
17.16	HDMI Cable Distance	Suitable for 4K60 operation with appropriate high-speed HDMI cables		
17.17	Power Supply	100–240 V AC, 50/60 Hz, external DC adapter		
17.18	Power Consumption	≤15 W		
17.19	Approved Makes	Kramer, Liberty AV, Crestron or equivalent		
17.20	Bid Specific OEM Authorization	Required		

18. HDMI Wall Plate Extender Set				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
18.1	System Type	HDMI over HDBaseT Wall-Plate Extender Set		
18.2	Configuration	1 × Transmitter + 1 × Receiver		
18.3	HDMI Input	Minimum 1 × HDMI Type-A		
18.4	HDMI Output	Minimum 1 × HDMI Type-A		
18.5	Transmission Medium	Single Cat6/Cat6A twisted-pair cable		
18.6	HDBaseT	Supported		
18.7	Maximum Resolution	Up to 4K UHD		
18.8	4K Transmission	4K@60 Hz, 4:2:0 up to 40 m		
18.9	Full HD Transmission	1080p up to 70 m		
18.10	Video Bandwidth	Minimum 10.2 Gbps		
18.11	HDMI Standard	HDMI 1.4b or better		
18.12	HDCP	HDCP 2.2 compliant		
18.13	4K Formats	4K@30 Hz 4:4:4 and 4K@60 Hz 4:2:0 or better		
18.14	Mounting	Wall/flush mounting with suitable cover plate		
18.15	Operating Temperature	0°C to 40°C or better		
18.16	Input Power	100–240 V AC, 50/60 Hz power adapter		

18.17	Power Consumption	≤10 W		
18.18	Approved Makes	Kramer, Liberty AV, Crestron or equivalent		
18.19	Bid Specific OEM Authorization	Required		

19. HDMI Extender Set				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
19.1	System Type	HDMI Over HDBaseT Extender Set		
19.2	Configuration	1 × Transmitter + 1 × Receiver		
19.3	HDMI Input	Minimum 1 × HDMI Type-A		
19.4	HDMI Output	Minimum 1 × HDMI Type-A		
19.5	Transmission Technology	HDBaseT over single twisted-pair cable		
19.6	Transmission Distance	Minimum 70 m for 1080p; minimum 40 m for 4K@60 Hz		
19.7	Cable	Solid-core shielded Cat6/Cat6A or better		
19.8	Maximum Resolution	Up to 4096 × 2160 @ 60 Hz		
19.9	4K Format	4K@60 Hz, 4:4:4, 8-bit		
19.10	Bandwidth	Minimum 18 Gbps compressed / 10.2 Gbps uncompressed		
19.11	HDMI Standard	HDMI 2.0 or better		
19.12	HDCP	HDCP 2.2 compliant		
19.13	Status Indication	Power/link/status diagnostic LEDs		
19.14	Power Supply	100–240 V AC, 50/60 Hz input; approximately 18 V DC output		
19.15	Power Consumption	≤13 W		
19.16	Approved Makes	Kramer, Liberty AV, Crestron or equivalent		
19.17	Bid Specific OEM Authorization	Required		

20. Cat 6 Patch Cables				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
20.1	Cable Type	High-Speed HDMI Cable with Ethernet		
20.2	Length	6 ft (approx. 1.83 m)		
20.3	Connector	HDMI Type-A Male to HDMI Type-A Male		

20.4	HDMI Standard	HDMI 2.0 / Premium High-Speed HDMI or better		
20.5	Bandwidth	18 Gbps minimum		
20.6	Video Resolution	Up to 4K UHD @ 60 Hz		
20.7	Chroma Sampling	04:04:04		
20.8	HDR	HDR support		
20.9	HDCP	HDCP 2.2 or better		
20.10	Connector Plating	Gold-plated contact surfaces		
20.11	Audio	Support for all standard HDMI audio formats		
20.12	Approved Makes	Kramer, Liberty AV, Crestron or equivalent		
20.13	Bid Specific OEM Authorization	Required		

21. Cat 6A Cable				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
21.1	Cable Type	Category 6A F/UTP Shielded LAN Cable		
21.2	Construction	4 twisted pairs with overall foil shield		
21.3	Conductor	23 AWG solid annealed bare copper		
21.4	Number of Pairs	4 Pairs / 8 Conductors		
21.5	Conductor Type	Solid copper		
21.6	Insulation	High-density polyethylene (HDPE) or better		
21.7	Shielding	Overall foil shield		
21.8	Frequency	Up to 500 MHz or better		
21.9	Category Standard	ANSI/TIA-568 Category 6A or equivalent		
21.10	Data Rate	Supports 10/100/1000 Mbps and 10GBASE-T		
21.11	Maximum Permanent Link	Up to 90 m, as per structured cabling standards		
21.12	PoE Support	Shall support IEEE 802.3af/at/bt PoE applications		
21.13	HDBaseT	Suitable for HDBaseT applications		
21.14	Jacket	Low-smoke/lead-free PVC or equivalent, suitable for installation		
21.15	Cable Length	305 m / 1000 ft nominal		

21.16	Approved Makes	Systimax, Liberty AV, Beldon or equivalent		
21.17	Bid Specific OEM Authorization	Required		

22. Cables & Connectors				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
22.1	Interconnecting Cables	Professional-grade cables suitable for audio, video, control and network interconnections as applicable to the complete system		
22.2	Audio Cables	Balanced shielded audio cable, 2-core/2-pair, 22–24 AWG or better, low capacitance, suitable for microphone/line-level signals		
22.3	Speaker Cables	2-core stranded copper speaker cable, minimum 1.5 sq.mm / 2.5 sq.mm as required by load and distance, suitable for 70/100 V and low-impedance speaker systems		
22.4	HDMI Cables	High-Speed/Premium High-Speed HDMI cable, supporting minimum 18 Gbps, 4K @ 60 Hz, HDR, HDCP 2.2, Ethernet, ARC and CEC wherever required		
22.5	Audio Connectors	XLR, TRS, RCA, Euroblock/terminal block or equivalent as required		
22.6	Cable Management	Cable ties, Velcro straps, labels, glands, clips and other accessories required for a neat installation shall be included		
22.7	PVC Conduit	Rigid PVC conduit suitable for routing/protection of ELV, AV, control and communication cables		
22.8	Conduit Size	Minimum 20 mm or as required based on cable quantity and applicable fill requirements		

22.9	Conduit Accessories	Bends, elbows, couplers, junction boxes, inspection boxes, saddles, clips and other necessary accessories		
22.10	Quantity	Complete supply of cables, connectors, conduit, casing and accessories required for a fully functional system		
22.11	Approved Makes	Belden, Sudhakar, VIP, any Reputed		

23. Rack				
Sr.No.	Parameter	Technical Specification	Compliance Yes/No	Reference (Data Sheet / OEM undertaking)
23.1	Type	19-inch floor-standing network/AV rack		
23.2	Front Door	Lockable toughened glass/acrylic or perforated metal door		
23.3	Rear Door	Lockable steel/perforated steel door		
23.4	Side Panels	Removable lockable side panels		
23.5	Cable Entry	Cable entry provisions at top and bottom		
23.6	Mobility	Heavy-duty castors, minimum 4 nos., with locking/braking arrangement		
23.7	Ventilation	Ventilated top/bottom and suitable fan mounting provision		
23.8	Horizontal Cable Organizer	1U, 19-inch rack-mountable, loop/finger type, suitable for organized routing of patch/network/AV cables		
23.9	Rack Shelf	19-inch rack-mountable fixed shelf,		
23.10	Rack PDU	19-inch rack-mountable, 2U, single-phase, 230 V AC, 50/60 Hz		
23.11	PDU Rating	8 A minimum with suitable overload protection		
23.12	PDU Sockets	Minimum 12 × Indian round-pin 5 A sockets		
23.13	Rack Air Circulation Module	Rack/tower-mounted cooling fan module suitable for 19-inch rack installation		
23.14	Airflow	Minimum 180 CFM		

23.15	Cable Management	Provision for vertical/horizontal cable routing and segregation		
23.16	Accessories	All brackets, screws, nuts, washers, cable-management accessories		
23.17	Approved Makes	Netrack, Valrack, APW or equivalent		

Section J

APPROVED MAKES OF MATERIALS / EQUIPMENTS

The make of equipment shall be from among those mentioned below:

Sr. No	Description	Approved Makes
1.1	Main Front of Stage Surround Speaker/stage monitor	Martin Audio, L-Acoustic, Pulz, K-array, Yamaha, Genelac, Procella Audio QSC, JBL Professional or Equivalent
1.2	Control Room Speaker	Renku-Heinz, Martin Audio, L-Acoustic, Pulz, Yamaha, Meyer sound QSC, JBL Professional or Equivalent
1.3	Digital Signal Processor (DSP)	Martin Audio, Ashly, Symetrix, L-Acoustic, Pulz, Klipsch, Yamaha, QSC or Equivalent
1.4	Power amplifier	Martin Audio, Powersoft, L-Acoustic, Pulz, Klipsch, NEXO, Lab Gruppen, QSC or Equivalent
1.5	Subwoofer	Martin Audio, L-Acoustic, Pulz, Klipsch, Yamaha, QSC, JBL Professional or Equivalent
1.6	Digital wireless handheld Microphone	Sennheiser, Rode, Clock Audio, Wisycom, Zaxcom, MIPRO Shure, Audio-Technica or Equivalent
1.7	Digital wireless lavalier Microphone	Sennheiser, Rode, Clock Audio, Wisycom, Zaxcom, MIPRO, Shure, Audio-Technica or Equivalent
1.8	Digital wireless gooseneck microphone	Sennheiser, Rode, Clock Audio, Wisycom, Zaxcom, MIPRO, Shure, Audio-Technica or Equivalent
1.9	Digital Wireless Quad Receiver	Shure, Sennheiser, Audio-Technica or equivalent
2.0	Digital Mixing console	Xilica, Yamaha, Allen & Heath, Lawo, Midas, Bose, Behringer, Yamaha, Allen & Heath or Equivalent
2.1	HDMI Transmitter	Extron, Crestron, AMX or Equivalent
2.2	Charging Station	Sennheiser, Shure, Audio-Technica or equivalent
2.3	HDMI Distribution Amplifier	Kramer, Liberty AV, Crestron or equivalent
2.4	HDMI Wall Plate Extender Set	Kramer, Liberty AV, Crestron or equivalent
2.5	HDMI Extender Set	Kramer, Liberty AV, Crestron or equivalent
2.6	HDMI Receiver	Extron, Crestron, AMX or Equivalent
2.7	Cat 6 Patch Cables	Kramer, Liberty AV, Crestron or equivalent
2.8	Bulk Cables, Connectors	Belden, Sudhakar, VIP, any Reputed
2.9	Cat 6A Cable	Systimax, Liberty AV, Beldon or equivalent
3.0	Network Rack	Netrack, Valrack, APW or equivalent

3.1	Display	LG, Samsung, Delta, Indotronix Innovation, Xtreme Media or Equivalent
3.2	All in One LED Controller	LG, Samsung, Delta, Indotronix Innovation, Xtreme Media or Equivalent

We hereby confirm that the offered Audio and Video system is as per the tender specifications and deliver the objective and requirement as stated in the tender.

Place:

Signature of Contractor

Date:

Name and designation:

Name of firm with Seal:

Section K

OFFERED MAKES & Models OF MATERIALS / EQUIPMENTS

(TO BE UPLOADED ALONG WITH PART-I OF THE TENDER)

S/N	Item Description	Offered Make	Offered Model	Technical Catalogue / Brochure Attached (Yes / No)
1.	Active LED Display			
2.	All in One LED Controller			
3.	Front Speaker			
4.	Stage monitor Speaker			
5.	Control Room Speaker			
6.	Subwoofer			
7.	Digital Signal Processor (DSP)			
8.	6-Channel Power Amplifier			
9.	4-Channel Power Amplifier			
10.	2-Channel Power Amplifier			
11.	Digital Mixing Console			
12.	Digital Wireless Quad Receiver			
13.	Digital wireless handheld Microphone			
14.	Digital wireless lavalier Microphone			
15.	Digital wireless gooseneck microphone			
16.	Charging Station			

17.	HDMI Distribution Amplifier			
18.	HDMI Wall Plate Extender Set			
19.	HDMI Extender Set			
20.	Cat 6 Patch Cables			
21.	Cat 6A Cable			
22.	Bulk Cables & Connectors			
23.	Network Rack			

We hereby confirm that the offered Audio & Video system is as per the tender specifications and deliver the objective and requirement as stated in the tender.

Place:

Signature of Contractor

Date:

Name and designation:

Name of firm with Seal:

Section - L

A bidder is liable for debarment/disqualification from bidding on the following rounds:

1. If it is determined that the bidder has committed the following acts or omissions in contravention of the code of integrity:
 - a) Making offer, solicitation or acceptance of bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process.
 - b) Any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained, or an obligation avoided.
 - c) Any collusion, bid rigging or anticompetitive behavior that may impair the transparency, fairness and the progress of the procurement process.
 - d) Improper use of information provided by the procuring entity to the bidder with an intent to gain unfair advantage in the procurement process or for personal gain.
 - e) Any financial or business transactions between the bidder and any official of the procuring entity related to tender or execution process of contract: which can affect the decision of the procuring entity directly or indirectly.
 - f) Any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process.
 - g) Obstruction of any investigation or auditing of a procurement process.
 - h) Making false declaration or providing false information for participation in a tender process or to secure a contract;
 - i) Failed to disclose conflict of interest.
 - j) Failed to disclose any previous transgressions made in respect of the provisions of sub-clause(i) with any public institution / entity in India or any other country during the last three years or of being debarred by any public procuring institution / entity
2. For any actions or omissions by the bidder other than violation of code of integrity, which in the opinion of the Bank warrants debarment, for the reasons like supply of sub-standard material, on-supply of material, abandonment of works, substandard quality of works, failure to abide terms of the tender etc.
3. If the bidder has been convicted of an offence— (a) under the Prevention of Corruption Act, 1988; or (b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

Undertaking regarding declaration of debarment by public institution(s)

(To be submitted by the tenderer on their letterhead)

Name of Work:

1. I / we(Name of the bidder) declares that

(a) I / we or any of our allied firm* is / are not debarred / suspended / blacklisted by any public institution / entity in India or any other country as on (last date of submission of bid).

(b) I / we or any of our allied firm* have not made any transgression in respect of the code of integrity with any public institution / entity in India or any other country in last three years as on....(last date of submission of bid).

(c) I / we will inform the Bank in writing, in case, I / we or any of our allied firm* is / are debarred / suspended / blacklisted by any public institution / entity in India or other country on or before award of work for the captioned work.

2. I / we..... (Name of the firm) declare that I /we or our allied firm* (Name of the allied firms(s)) is / are debarred / suspended/ blacklisted by (Name and address of public institution in India or any other country) and the same effective up to (date). A copy of such letter is attached for your information and record.

(Seal and signature of the applicant)

Date:

Place:

Note: Strike out one of the above two declarations which is not applicable

*Allied firm: A firm would be termed as “allied firm” if the management is common, or substantial or majority shares are owned by the banned / suspended firm and by virtue of this it has a controlling voice. Further all successor firms will also be considered as allied firms.

Annexure I
ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT made the _____ day of _____ between the Reserve Bank of India having its Central office at Mumbai – 400 001 (hereinafter called “The Bank”) of the one part and _____ (herein after called the “contractor”) of the other part.

WHEREAS THE Bank is desirous of carrying out ‘**Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank’s Office Building at Reserve Bank of India (RBI), Hyderabad**’ has caused Drawing and Bills of Quantities showing and describing the work to be done to be prepared by or under the direction of Bank’s Engineer.

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

NOW IT IS HEREBY AGREED AS FOLLOWS

1. In consideration of the said Contract Amount to be paid at the times and in the manner set forth in the said Conditions, the contractor shall upon and subject to the said Conditions execute and complete the work shown upon the said Drawings and described in the said Specifications and the Schedule of Quantities.
2. The Bank shall pay the contractor the said Contract Amount or such other sum as shall become payable, at the times and in the manner specified in the said Conditions.
3. The term “Bank’s Engineer” in the said condition regarding execution of the work, quality of construction, quality of materials, progress and completion of the project etc. shall mean the Deputy General Manager (Technical), or any other person designated for the purpose by the Reserve Bank of India. As far as the operation of the provision of the contract viz. clause relating to settlement of disputes through arbitration, the term

“Bank’s Engineer” shall be read as Deputy General Manager / Officer – in-charge, of the Estate Department, Reserve Bank of India, Hyderabad.

4. The said Conditions and Appendix thereto shall be read and construed as forming part of this Agreement, and the parties hereto shall respectively abide by, submit themselves to the said Conditions perform the agreements on their part respectively in the said Conditions contained.
5. The plans, agreement and documents mentioned herein shall form the basis of this contract.
6. This Contract is neither a fixed lump sum Contract nor a piece Work Contract, but it is a Contract to carry out the work in respect of **“Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank’s Office Building at Reserve Bank of India (RBI), Hyderabad”** to be paid for according to actual measured quantities at the rates contained in the Schedule of quantities or as provided in the said Conditions.
7. The Contractor shall afford every reasonable facility for the carrying out of all works relating to civil works, installation of sanitary work and fittings, permanent water supply, electrical installations, fittings, and other ancillary works in the manner laid down in the said Conditions, and shall make good any damages done to walls, floors, etc. after the completion of such works.
8. The Bank reserves to itself the right of altering the Drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this Contract.
9. The Contractor shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure/systems/equipment's etc., which may come to the possession or knowledge of the Contractor during discharging its contractual obligations in connection with this agreement, to any third party and shall at all times hold the same in strictest confidence. The Contractor shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The Contractor shall not publish,

permit to be published, or disclose any of the works in any trade or technical paper or elsewhere without the previous written consent of the Bank. The Contractor shall indemnify the Bank for any loss suffered by the Bank because of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the Contractor and the Bank shall be entitled to claim damages and pursue legal remedies. The Contractor shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this agreement are fully satisfied. The Contractor's obligations with respect to non-disclosure and confidentiality will survive the expiry or termination of this agreement for whatever reason.

10. Time shall be considered as the essence of this Contract and the Contractor hereby agrees to commence the work soon after the site is handed over to him or from the day after the date of issue of formal works order as provided for in the said Conditions whichever is later and to complete the entire work within specified time period subject nevertheless to the provisions for extension of time.
11. All payments by the Bank under this contract will be made only at Hyderabad.
12. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Hyderabad and only Courts in Hyderabad shall have jurisdiction to determine the same.
13. The several parts of this Contract have been read by the Contractor and fully understood by the Contractor.
14. The contractor/agency shall be solely responsible for full compliance with the provision of Sexual harassment of Women at workplace under Prevention, Prohibition and Redressal Act 2013. In case of any complaint of sexual harassment against its employee within the premises of Bank, the complaint will be filed before the Internal Complaints Committee constituted by the contractor/agency and the contractor/agency shall ensure appropriate action under the said Act in respect of the complaint.
 - (a) Any complaint of sexual harassment from any aggrieved employee of the contractor against any employee of the Bank shall be taken cognizance of by the Regional Complaints Committee constituted by the bank.

- (b) The contractor shall be responsible for any monetary compensation that may need to be paid in case of incident involves the employee of the contractor, for instance any monetary relief to Bank's employee, if sexual violence by the employee of the contractor id proved.
- (c) The contractor shall be responsible for educating its employees about the prevention of sexual harassment at workplace and related issues.
- (d) The contractor shall provide a complete and updated list of its employees who are deployed within the bank's premises.

15. Bidders shall comply with minimum wage Act and labour Act in force. Notices/penalty, if any, issued/ imposed by any statutory bodies in the work due to lapses by the contractor in complying with the statutory norms/ requirements shall be paid by the contractor, without any claim to the Bank.

IN WITNESS WHERE OF the Bank and the Contractor have set their respective hands to these presents and two duplicates thereof the day and year first hereinabove written. (If the Contractor is a partnership or an individual).

IN WITNESS WHERE OF the Bank has set its hands to these presents through its duly authorized officials and the Contractor has caused its common seal to be affixed hereunto and the said two duplicates/ has caused these presents and the said two duplicates hereof to be executed on its behalf, the day and year first hereinabove written, (If the Contractor is a Company).

Signature Clause

SIGNED AND DELIVERED BY THE
Reserve Bank of India by the hand of

Shri

(Name and designation)

In the presence of witnesses

(1)

Address.....

(2)

Address.....

SIGNED AND DELIVERED BY If the party is a partnership firm or an individual should be signed by all or on behalf of all the partners

(1)

Address.....

(2)

Address

.....

Witnesses

The COMMON SEAL OF:

Was hereunto affixed pursuant to the Resolutions passed by its Board of Directors at the meeting held

OnIn the Presence of

(1)

(2)

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

- (1) If the contractor signs under Its common seals,
the signature clause should tally with the sealing
clause in the Articles of Association
- (2)..... If the Contractor is signing by the hand of power
of attorney, whether a company or individual

Annexure II

**Proforma of Bank Guarantee for Earnest Money Deposit (EMD)
(To be stamped as Security Bond)**

The Regional Director,
Reserve Bank of India
Hyderabad

Place:

Date:

Dear Sir/Madam,

Supply, Installation, Testing and Commissioning of Audio & Video system at the Auditorium in the Bank's Office Building at Reserve Bank of India (RBI), Hyderabad

WHEREAS

The Reserve Bank of India, having its Central Office at Shahid Bhagat Singh Road, Mumbai and an office at Hyderabad (hereinafter called the 'Bank') has invited **e- tenders** for the work **Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank's Office Building at Reserve Bank of India (RBI), Hyderabad** (hereinafter referred to as 'the Work') on the terms and conditions mentioned in the tender documents.

1. It is one of the terms of invitation of tenders that the Contractor shall furnish a Bank Guarantee for a sum of Rs. _____ (Rupees _____ only) as Earnest Money Deposit.

2. M/s _____, (hereinafter called as

Contractor), who are our constituents intend to submit their tender for the said work and have requested us to furnish guarantee to the Bank in respect of the said sum of Rs. (Rupees only).

NOW THIS GUARANTEE WITNESS THE

1. We _____ (Bank) do hereby agree with and undertake to the Reserve Bank of India, their Successors, Assigns that in the event of the Reserve Bank of

India coming to the conclusion that the Contractor have not performed their obligations under the said conditions of the tender or have committed a breach thereof, which conclusion shall be binding on us as well as the said Contractor, we shall on demand by the Reserve Bank of India, pay without demur to the Reserve Bank of India, a sum of Rs . _____ (Rupees _____

only) or any lower amount that may be demanded by the Reserve Bank of India. Our guarantee shall be treated as equivalent to the Earnest Money Deposit for the due performance of the obligations of the Contractor under the said Conditions, provided, however, that our liability against such sum shall not exceed the sum of

Rs. _____/- (Rupees _____ only).

2. We also agree to undertake to and confirm that the sum not exceeding Rs.

_____/- (Rupees _____ only) as aforesaid shall be paid by us without any demur or protest, merely on demand from the Reserve Bank of India on receipt of a notice in writing stating the amount is due to them and we shall not ask for any further proof or evidence and the notice from the Reserve Bank of India shall be conclusive and binding on us and shall not be questioned by us in any respect or manner whatsoever. We undertake to pay the amount claimed by the Reserve Bank of India within a period of one week from the date of receipt of the notice as aforesaid.

3. We confirm that our obligation to the Reserve Bank of India under this guarantee shall be independent of the agreement or agreements or other understandings between the Reserve Bank of India and the Contractor.

This guarantee shall not be revoked by us without prior consent in writing of the Reserve Bank of India.

We hereby further agree that –

- a) Any forbearance or commission on the part of the Reserve Bank of India in enforcing the conditions of the said agreement or in compliance with any of the terms and conditions stipulated in the said tender and/or hereunder or

granting of any time or showing of any indulgence by the Reserve Bank of India to the Contractor or any other matters in connection therewith shall not discharge us in any way and our obligation under this guarantee. This guarantee shall be discharged only by the performance by the Bidders of their obligations and in the event of their failure to do so, by payment by us of the sum not exceeding Rs. _____/-
(Rupees..... only)

- b) Our liability under these presents shall not exceed the sum of Rs. _____/- (Rupees _____ only)
- c) Our liability under this agreement shall not be affected by any infirmity or irregularity on the part of our said constituents in tendering for the said work or their obligations there under or by dissolution or change in the constitution of our said constituents.
- d) This guarantee shall remain in force upto _____ provided that if so desired by the Reserve Bank of India, this guarantee shall be renewed for a further period as may be indicated by them on the same terms and conditions as contained herein
- e) Our liability under this presents will terminate unless these presents are renewed as provided hereinabove on the _____ or on the day when our said constituents comply with their obligations, as to which a certificate in writing by the Reserve Bank of India alone is the conclusive proof whichever date is later. Unless a claim or suit or action is filed against us within six months from that date or any extended period, all the rights of the Reserve Bank of India against us under this guarantee shall be forfeited and we shall be released and discharged from all our obligations and liabilities hereunder.

Yours' faithfully,

For and on behalf of

_____ Bank.

Authorized official.

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

Annexure III
Proforma of Bank Guarantee for Performance
Security Deposit

The Regional Director,
Reserve Bank of India
Hyderabad

Place
Date

Dear Sir/Madam,

Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank's Office Building at Reserve Bank of India (RBI), Hyderabad

WHEREAS

Reserve Bank of India, having its Central Office at Shahid Bhagat Singh Road, Mumbai, (hereinafter called "the RBI") has awarded the Contract for the captioned project (hereinafter called the "Contract") to M/s _____ (Name of the Contractor) (hereinafter called "the said Contractor" which expression shall include its successors and assigns).

AND Whereas the Contractor is bound by the said Contract to submit to RBI a Performance Security for a total amount of ₹. _____ (Rupees _____ only) (Amount in figures and words) for the due fulfilment by the said contractor of the terms and conditions contained in the contract.

We, _____ (Name of the Bank), (hereinafter called "the Bank"), at the request of M/s _____, the contractor, do hereby undertake to pay to the RBI an amount not exceeding Rs _____ as Performance Guarantee for due fulfilment of the terms and conditions of the contract.

NOW THIS GUARANTEE WITNESS THE

1. We _____ (Name of the Bank) do hereby agree with and undertake to RBI, their Successors, Assigns that in the event of the RBI

coming to the conclusion that the Contractor has not performed his obligations under the said conditions of the contract or have committed a breach thereof, which conclusion shall be binding on us as well as the said contractor; we shall on demand by the RBI, pay without demur to the RBI, a sum of Rs. _____ (Rupees _____ only) or any lower amount that may be demanded by the RBI. Our guarantee shall be treated as equivalent to the Performance Guarantee Amount for the due performance of the obligations of the Contractor under the said Contract, provided, however, that our liability against such sum shall not exceed the sum of Rs. _____ (Rupees _____ only).

2. We also agree to undertake to and confirm that the sum not exceeding Rs. _____/- (Rupees _____ only) as aforesaid shall be paid by us without any demur or protest, merely on demand from the Reserve Bank of India on receipt of a notice in writing stating the amount is due to them and we shall not ask for any further proof or evidence and the notice from the Reserve Bank of India shall be conclusive and binding on us and shall not be questioned by us in any respect or manner whatsoever. The Bank shall pay to RBI any money so demanded notwithstanding any dispute/disputes raised by the Contractor in any suit or proceedings pending before any Court, Tribunal or Arbitrator/s relating thereto and the liability under this guarantee shall be absolute and unequivocal. We undertake to pay the amount claimed by the RBI within a period of one week from the date of receipt of the notice as aforesaid.
3. We confirm that our obligation to the Reserve Bank of India under this guarantee shall be independent of the agreement or agreements or other understandings between the Reserve Bank of India and the Contractor.
4. This guarantee shall not be revoked by us without prior consent in writing of the RBI.

We hereby further agree that –

- a) Any forbearance or commission on the part of the Reserve Bank of India in enforcing the conditions of the said agreement or in compliance with any of the terms and conditions stipulated in the said tender and/or hereunder or granting of any time or showing of any indulgence by the Reserve Bank of India to the Contractor or any other

matters in connection therewith shall not discharge us in any way and our obligation under this guarantee. This guarantee shall be discharged only by the performance by the Bidders of their obligations and in the event of their failure to do so, by payment by us of the sum not exceeding Rs. _____/- (Rupees..... only)

- b) Our liability under these presents shall not exceed the sum of Rs. _____(Rupees only).
- c) Our liability under this agreement shall not be affected by any infirmity or irregularity on the part of our said constituents/clients or their obligations thereunder or by dissolution or change in the constitution of our said constituents.
- d) This guarantee shall remain in force up to _____(60 days beyond the Defect liability period) provided that if so desired by the RBI, this guarantee shall be renewed for a further period as may be indicated by them on the same terms and conditions as contained herein.
- e) Our liability under these presents will terminate unless these presents are renewed as provided hereinabove on the or on the day when our said constituents comply with their obligations, as to which a certificate in writing by the RBI alone is the conclusive proof whichever date is later. Unless a claim or suit or action is filed against us within or any extended period, all the rights of the RBI against us under this guarantee shall be forfeited and we shall be released and discharged from all our obligations and liabilities hereunder.

In witness whereof I/We of the Bank have signed and sealed this guarantee on the ----- day of ----- (Month) (Year) being herewith duly authorized.

For and on behalf of _____ (Name of the Bank)

Signature of authorized Bank official

Name:

Designation

Stamp/ Seal of the Bank

Signed, sealed and delivered for and on behalf of the Bank by the above named in the presence of:

Witness 1

Signature

Name

Address

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

ANNEXURE- "IV"

CLIENT's CERTIFICATE REG. PERFORMANCE OF CONTRACTOR before 5 years

Name & address of the Client

Details of Works executed by Shri /M/s

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

d) Mobilization of manpower	Outstanding/Very Good/ Good/Satisfactory/poor
e) General behaviour	Outstanding/Very Good/ Good/Satisfactory/poor

**Signature of the Reporting Officer* with
Office**

Seal

*** Regarding performance report/ client's certificate, for works carried out for Government/ public sector companies, the certificate should be signed by the concerned Executive Engineer or an officer in an equivalent or higher rank. For works carried out for Private companies, Copy of TDS has to be submitted for proving the credentials/contract amount.**

(i) All columns should be filled in properly

(ii) The Client Certificates should be submitted for each of the Prequalification work/s

ANNEXURE- “V”

CLIENT’S CERTIFICATE REG. PERFORMANCE / FEEDBACK OF THE PRODUCT INSTALLED WITH IN LAST 5 YEARS SIMILAR TO THE OFFERED PRODUCT

(Bidder should get this certificate from the previous client for the product feedback which was installed similar to the offered product in this tender and upload the same along with Part-I of tender)

Name & address of the Client

Details of Works executed by Shri /M/s

- 1 Name of work with brief particulars
- 2 Agreement No. and date
- 3 Agreement amount
- 4 Date of commencement of work
- 5 Stipulated date of completion
- 6 Actual date of completion
- 7 Gross amount of the work completed and paid
- 9 Name and address of the authority under whom works executed
- 10 Make & Model of the installed video wall product
- 11 i) Quality of Product (indicate grading) Outstanding/Very Good/
Good/Satisfactory/poor
- ii) Any issues arised after commissioning of the system Yes / No
- iii) Maximum shutdown period (in days) encountered due to defects / malfunction in the system _____
Satisfactory / Not
satisfactory
- iv) Service Support post installation

**Signature of the Reporting Officer* with
Office**

Seal

*** Regarding performance / Feedback of the product report/ client's certificate, for works carried out for Government/ public sector companies, the certificate should be signed by the concerned Executive Engineer or an officer in an equivalent or higher rank. For works carried out for Private companies, Copy of TDS has to be submitted for proving the credentials/contract amount.**

(i) All columns should be filled in properly

(ii) The Feedback of the product offered should be submitted for at least two of the previous work/s

ANNEXURE - VI

FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK

On the Letter Head of Bank

Ref. No. _____

Date: _____

Regional Director
Reserve Bank of India
Estate Department
Saifabad, Hyderabad-
500004

Respected Sir/Madam,

This is to certify that to the best of our knowledge and information M/s. /Shri..... a customer of our bank having marginally noted address, are/is respectable and can be treated as good for any engagement up to a limit of **₹45,00,000/- (Rupees Forty-Five Lakh only)**.

This certificate is issued without any guarantee or responsibility on the bank or any of its officers. Other particulars are given below for your perusal and record:

Pro forma for Details of Principal Banker/other bankers

Sr. No.	Particulars	Principal Banker	Banker	Banker
1	Address			
2	Contact Person			
3	E-mail			
4	Telephone Number			
5	Fax Number			

(Signature)
For the Bank
Note:

Bankers' certificates should be on letter head of the Bank, sealed in cover addressed to RBI.

In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

Annexure – VII

i. List of similar works executed by the organization during the last 5 years (completed on or before September 30, 2021)

Sr. No.	Name of the work	Name and address of the owner	Nature & specification of the work	The name and full address of the officer under whom the work was carried out	Amount	Whether work completed in time	Remarks

ii. Pro forma for Details of Similar Works executed individually costing (a) Three works each costing not less than the amount equal to 40% of the estimated cost or (b) Two works each costing not less than the amount equal to 50% of the estimated cost or (c) One work costing not less than the amount equal to 80% of the estimated cost during the last 5 years (completed as on September 30, 2026)

Sr. No.	Name and address of the firm	Nature of similar work	Work order no. and date with Value of the work	Whether works completed in time or not (Give date of start & and date of completion)	Completion period as per work order	Fax /phone number &Contact person of the firm

Place:

Date:

Signature of the Tenderer

Annexure - VIII

FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF PROPOSAL

(On Non-Judicial Stamp Paper of appropriate value)

Know all men by these presents,
We.....(Name of the Bidder and address of
their registered office) do hereby constitute, appoint and authorize Mr./Ms.
..... (Name and residential
address of Power of Attorney holder) who is presently employed with us and holding the position
of

as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary
in connection with or incidental to our bid for the “**Supply, Installation, Testing and
Commissioning of Audio & Video system at Auditorium in Bank’s Office Building at
Reserve Bank of India (RBI), Hyderabad**” on Item Rate Contract basis for Reserve Bank of
India including signing and submission of all documents and providing information / responses
to RBI, representing us in all matters before RBI, and generally dealing with RBI in all matters
in connection with our proposal for the said Project.

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

Note:

Power of Attorney should be properly stamped and notarized.

Power of Attorney furnished shall be irrevocable.

Signature/(s) of the Bidder

Name/(s)

Stamp/Seal of the Bidder

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

Annexure - IX

Appendix Hereinbefore Referred To

1.	Defects Liability Period or warranty	Twelve months from the date of Virtual Completion Certificate
2.	Period of Final Measurement and honoring period of bill	30 days for interim bill & 90 days for final bill
3.	Date of Commencement	From the 14 th day of date of letter of issue of work order.
4.	Period of Completion	30 days from the 14 th day of work order.
5.	Liquidated damages/penalty for delay in completion of work	0.25% of the contract value per week of delay subject to a maximum of 10% of the contract amount.
6.	Value of works for interim /running bill	As per Payment terms
7.	Retention percentage	5% from each bill (RA & Final bill) which shall be release after defect liability period of one year.
8.	Installment of security deposit after virtual Completion	PBG as SD and RM as SD will be released after Defect liability Period subject to rectification of defects pointed out, (if any), satisfactorily.

Annexure - X

Schedule of Commercial Deviations

We confirm that all commercial terms and conditions and specifications of the Bank except for deviations listed below:

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

Seal & Signature of Tenderer.

Name

Designation

Date

Annexure – XI

Schedule of Technical Deviations

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

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

Seal & Signature of Tenderer.

Name

Designation

Date

ANNEXURE - "XII"

Format of Computerized Measurement Book

भारतीय रिज़र्व बैंक

RESERVE BANK OF INDIA

हैदराबाद कार्यालय

HYDERABAD OFFICE

कम्प्यूटरीकृत मापन पुस्तक

COMPUTERISED MEASUREMENT BOOK

(पेज 1 से __)

(Pages 1 to __)

यह पुस्तक M/s _____ से जारी की गई है

This Book is issued by M/s _____

प्रमाणित किया गया कि इस पुस्तक में __ पृष्ठ हैं

Certified that this book contains __ Pages

जिस अधिकारी को पुस्तक जारी की जाती है,

उसके हस्ताक्षर

**Signature of the official to whom
the book is issued**

Signature of AGM-Estate Department

॥
सूची
INDEX

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मापन परीक्षण का सारांश

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Reserve Bank of India
Estate Department
Hyderabad
Measurement
Name of the work:
Name of vendor: M/s
Date of commencement of work:
Work Order No:
Inward No:
Invoice No:
Date of completion of work:

S. No.	Description of item	Unit	Quantity

Reserve Bank of India
Estate Department
Hyderabad
Abstract
Name of the work -
Name of vendor:
Date of commencement of work:
Work Order No:
Inward No:
Invoice No:
Date of completion of work:

S. No.	Description of item	Unit	Quantity	Rate/Un it (in ₹)	Amount (in ₹)
	Total				

Notes : All the sheets shall be ruled. (sheets shall be in triplicate in three colours - white, yellow and green respectively, as per the proforma given above). Each Measurement Book shall be Hard bound and submitted along with each RA Bill & Final Bill.

Annexure – ‘XIII’

**Performa for Undertaking / Declaration / Certificate by the Bidder regarding country
sharing land border with India**

(To be submitted by bidders on their letter head duly sealed and signed by the authorized
signatory)

To,
The Regional Director
Reserve Bank of India
Estate Department,
Main Office Building,
Hyderabad- 500004

Name of Work: Supply, Installation, Testing and Commissioning of Audio & Video system at
Auditorium in Bank's Office Building at Reserve Bank of India (RBI), Hyderabad

Dear Sir,

I / We (Name of bidder) have read and understood the contents of the Office Memorandum (OM) F. No. 6/18/2019-PPD dated July 23, 2020 and its subsequent orders / revision issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India regarding the restrictions on procurement from a bidder of a country which shares a land border with India.

2. Based on the definitions mentioned in the above referred order and its subsequent revisions regarding the bidder, I / We certify that (Name of the bidder)

- i. is not from a country sharing land border with India, or
- ii. is from a country sharing land border with India and has been registered with the Competent Authority, the certificate of which is enclosed, or
- iii. is from a country sharing land border with India where Government of India has extended lines of credit, or iv. is from a country sharing land border with India where Government of India is engaged in developmental projects. (Strikeout whichever of the above is not applicable).

3. I /We hereby certify that (Name of bidder) fulfils all requirements in this regard and is eligible to be considered under the provision of the above referred Office Memorandum and its subsequent orders / revision. I/We also undertake that I/we (Name of bidder) will not sub-contract any work to a contractor from such country(ies) unless such contractor fulfils all the requirements under the above referred office memorandum / order.

4. I have understood that, if this Undertaking / Declaration / Certificate submitted by us found to be false, Bank shall be free to terminate our tender / Work Order. Bank shall also be free to initiate any legal action in accordance with law including forfeiting of Earnest Money Deposit / Performance Bank Guarantee / Security Deposit and / or debarring us from participating in tenders invited by the Bank in future.

Signature and name of the authorized signatory of the firm with Rubber Stamp

Date:

Place:

Annexure - XIV

Escalation Matrix for Project Follow-up

The tenderers are requested to fill in following particulars.

S.No.	Escalation Level	Name of the Person & Designation	Address	E-Mail ID	Phone Number
1	1 (Site - Supervisor)				
2	Junior Management				
3	Middle Management				
4	Top Management				

Escalation Matrix for DLP

The tenderers are requested to fill in following particulars.

S.No.	Escalation Level	Name of the Person & Designation	Address	E-Mail ID	Phone Number
1	1 (Service Manager)				
2	Junior Management				
3	Middle Management				
4	Top Management				

Annexure- XV
UNDERTAKING

(Regarding site visit by the tenderer in order to understand the work)

To,

The Regional Director
Reserve Bank of India
Estate Department
Hyderabad-500004.

Dear Sir,

NAME OF WORK: Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank's Office Building at Reserve Bank of India (RBI), Hyderabad.

We, _____, the tenderer for the above work confirm that we have visited the site and understood the proper details of the proposed system and also the scope of work for the proposed system. We are ready to install the product to the extent as required as per site conditions and as per tender terms & conditions. We assure that, the finishing of the product, workmanship etc. shall be maintained by us which shall be aesthetically appealing and of high standards.

Yours faithfully,

()

Authorised signatory

(Name and address of the company with Company Seal)

ANNEXURE- "XVI"

Proforma for Letter of Authorization and Maintenance undertaking from the bidder

To
The Regional Director,
Reserve of India,
Estate Department
Hyderabad

Subject: Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank's Office Building at Reserve Bank of India (RBI), Hyderabad- Letter of Authorization and Maintenance undertaking.

Sir,

We _____, (name and address of the manufacturer) the manufacturers of _____ having factories at _____ (addresses of manufacturing / development locations) do hereby authorize M/s _____ (name and address of the tenderer) to bid, negotiate and conclude the contract with you against the above mentioned tender for the above equipment developed by us.

In the unlikely event of M/s _____ (tenderer) not remaining our authorised dealer, we, the original equipment manufacturer, shall continue to provide support for the products manufactured by us and provided under the scope of the captioned project at the rate agreed in the tender and terms and condition of tender, either directly or through any of dealer inducted by the Bank for maintenance of above system, in terms of providing spares/ updates / technical man power etc. i.e. all-inclusive service to your satisfaction, for minimum up to 5 years from the date of virtual completion of the captioned work.

Yours faithfully,

For and on behalf of

M/s _____ (Name of the manufacturer)

Seal and Signature:

Name:

Designation:

Un-Priced Bill of Quantities

Item No.	Technical Specifications	Unit	Qty
1.0	Indoor Active LED Display		
1.1	Supply, installation, testing and commissioning (SITC) of Indoor Active LED Display LED Display Size: 11.54 feet (width) X 6.82 feet (Height) = 78.7 Sq. feet Diagonal Size: 163 inches; 16:9 Aspect Ratio Pixel Pitch: 1.8 mm or less Pixel density: 289050 dots/m² or higher LED Type: Fully Flip Chip COB Module Size: 320X160 mm Ingress Protection: Front: IP54 Brightness: ≥ 700 cd/m² Brightness Control: Manual/automatic Colour Temperature: 1000K-9500K Adjustable or higher Horizontal Viewing Angle: $\geq 160^\circ$ Vertical Viewing Angle: $\geq 160^\circ$ Contrast Raio: minimum 10000:1 Input Power <Max>: 285 W/m² Input Power< Typical>: 130 W/m² Refresh Rate: ≥ 7680 Hz Input Power Frequency: 50-60Hz or more LED lifetime hours: 1,00,000 Hours Certificate: BIS	Nos.	1
1.2	Supply, installation, testing and commissioning of All-in-one LED Controller Type: 2-in-1 LED Display Controller	Nos.	1

	Inputs: 2xHDMI, 1x DVI/DP Port, 1x USB and Optional Display Port 1.2 or 12G-SDI Input Resolution: Support up to 4K × 2K @ 60 Hz Ethernet Ports: Minimum of 6 x 1/10/100/1000 Gigabit Ethernet Fiber Interface: Minimum 2 × optical fiber interfaces Cascading: Shall support controller cascading/loop-back functionality for system expansion and redundancy EDID Management: Shall support EDID management/configuration for connected video sources Control: Multiple control methods shall be supported through suitable software/hardware interfaces Power Supply: 100–240 VAC, 50/60 Hz or suitable universal AC power input Accessories: All required power cables, communication cables, software and standard accessories shall be supplied Certifications: ROHS, CE, BIS		
2.0	Audio Auditorium		
2.1	Main Auditorium Front Loudspeaker SITC of Passive 2-way full range point source speaker with coaxial driver arrangement: Type: Passive 2-Way full-range coaxial point-source loudspeaker Frequency Response: 60 Hz to 20 kHz or better Power Handling: Minimum 150 W AES Peak Power: Minimum 600 W Peak Sensitivity: Minimum 96 dB @ 1 W/1 m Maximum SPL: 116dB continuous or better Nominal Impedance: 8Ω Low Frequency Driver: 10" (250 mm) Low-Mid driver with coaxial entry or more High Frequency Driver: 1" (25 mm) voice coil compression driver mounted coaxially	Nos.	4

	Dispersion: 90° conical or better / equivalent uniform coverage Connector: 2 x Speakon Certifications: ROHS, MII, CE		
2.2	Dual 10" In-Wall Subwoofer System SITC of Dual 10-inch high-performance in-wall subwoofer system: Type: Professional passive in-wall / on-wall subwoofer system Frequency Response: 38 Hz to 500 Hz or better Power Handling: Minimum 500 W AES Peak Power: Minimum 2000 W Peak Sensitivity: Minimum 95.5 dB @ 1 W/1 m Maximum SPL: Minimum 122 dB continuous or better Nominal Impedance: 4Ω Dispersion: 170° horizontal, 90° vertical @ 400Hz or better LF Driver: 2 x 10" (250 mm) long throw weather resistant woofer Certifications: ROHS, MII ,CE	Nos.	2
2.3	Passive 12" Stage Monitor Loudspeaker SITC of Passive 12-inch 2-way full range stage floor monitor: Type: Passive 2-Way full-range coaxial point-source loudspeaker Frequency Response: 55 Hz to 20 kHz or better Power Handling: Minimum 250 W AES Peak Power: Minimum 1000 W peak Sensitivity: Minimum 98 dB @ 1 W/1 m Maximum SPL (Continuous): Minimum 122 dB continuous @ 1 m Nominal Impedance: 8Ω Dispersion: 60° conical	Nos.	2

	LF Driver: 12" Coaxial LF driver, 1" (coaxially mounted HF compression driver HF Driver: 1" exit compression driver, coaxially mounted Crossover: Passive 2-way crossover Connector: 2 x Speakon connector Certifications: ROHS, MII ,CE		
2.4	Passive 10" Control Room Monitor Speaker. SITC of Passive 10-inch 2-way local monitoring speaker: Type: Passive 2-way coaxial cinema surround loudspeaker Frequency Response: 65 Hz to 20 kHz or better Power Handling: Minimum 150 W AES Peak Power: Minimum 600 W peak Sensitivity: Minimum 96 dB @ 1 W/1 m Maximum SPL: Minimum 118 dB continuous / 124 dB peak @ 1 m Nominal Impedance: 8Ω LF Driver: Minimum 10" (250 mm) Low-Mid / Low-Frequency driver HF Driver: Minimum 1" (25 mm) voice-coil compression driver Crossover Frequency: Approximately 2.5 kHz Dispersion: Approximately 90° conical Connector: 2 x Speakon connector Certifications: ROHS, MII ,CE	Nos.	1
3.0	POWER AMPLIFIERS		
3.1	6-Channel Professional Power Amplifier SITC of high-efficiency multi-channel installation power amplifier: No. of Channels: 6 Output Power (per channel): Minimum 200 W/ Channel @ 8Ω, Minimum 300 W/ Channel @ 4Ω	Nos.	1

	Frequency Response: 30 Hz – 20 kHz or better Total Harmonic Distortion + Noise: $\leq 0.01\%$ at rated operating conditions Intermodulation Distortion: $\leq 0.02\%$ SMPTE or better Signal to Noise Ratio: ≥ 95 dB Damping factor: $>100 @ 8 \Omega$ Crosstalk: ≤ -90 dB Slew Rate: ≥ 50 V/μs Input Sensitivity: Approximately 1.3 V RMS / +5 dBu Input Impedance: 20 kΩ balanced or better Voltage Gain: Approximately 29 dB Bandwidth : ≥ 100 kHz Power requirement: 230–240 V AC, 50–60 Hz Inputs: Balanced audio input for each channel Outputs: Professional Speakon/NL4 Certifications: ROHS, MII, CE		
3.2	4-Channel Professional Power Amplifier SITC of multi-channel installation power amplifier: No. of Channels: 4 Output Power (per channel): Minimum 200 W/ Channel @ 8Ω, Minimum 300 W/Channel @ 4Ω Frequency Response: 30 Hz – 20 kHz or better Total Harmonic Distortion + Noise: $\leq 0.01\%$ at rated operating conditions Intermodulation Distortion: $\leq 0.02\%$ SMPTE or better Signal to Noise Ratio: ≥ 95 dB Damping factor: $>100 @ 8 \Omega$ Crosstalk: ≤ -90 dB Slew Rate: ≥ 50 V/μs Input Sensitivity: Approximately 1.3 V RMS / +5 dBu	Nos.	1

	Input Impedance: 20 kΩ balanced or better Voltage Gain: Approximately 29 dB Bandwidth: 100 kHz or better Protection: Short-circuit, ultrasonic/RF and thermal protection Load Protection: Turn-on delay and DC fault protection Subsonic filter: 30 Hz / 100 Hz selectable or equivalent Power requirement: 230–240 V AC, 50–60 Hz Inputs: Phoenix/Euroblock or equivalent Outputs: NL4 Speakon or equivalent Certifications: ROHS, MII ,CE		
3.3	2-Channel Power Amplifier SITC of heavy-duty 2-channel amplifier with bridge capability: No. of Channels: 2 Output Power (per channel): Minimum 500 W/channel @ 8 Ω and 750 W/channel @ 4 Ω Bridge Output: Minimum 1,400 W @ 8 Ω Frequency Response: 20 Hz – 20 kHz, ± 0.2 dB or better THD: $\leq 0.05\%$, 20 Hz–20 kHz at rated power IMD: $\leq 0.01\%$ or better Signal-to-Noise / Hum & Noise: ≥ 105 dB or better Damping Factor: ≥ 200 @ 8 Ω Input Sensitivity: Approximately 1.3 V RMS or better Bandwidth: ≥ 100 kHz Slew Rate: ≥ 50 V/μs Rise Time: ≤ 2 μs Input Impedance: ≥ 20 kΩ, balanced Protection: Short-circuit, thermal, DC fault, ultrasonic/RF and overload protection	Nos.	1

	Cooling: Forced-air cooling, front-to-rear Power: 230 - 240 VAC, 50-60 Hz Certifications: ROHS, MII, CE		
4.0	DIGITAL MIXING & SIGNAL PROCESSING SYSTEMS		
4.1	Digital Signal Processor (DSP) SITC of centralized matrix DSP core with internal multi-channel network audio: System Type: Digital Signal Processor Analog I/O: Minimum 8 Analog Inputs × 8 Analog Outputs Network Audio: Dante-enabled, minimum 4 × 4 network audio channels A/D & D/A: 24-bit Sampling Frequency: 48 kHz DSP: 32-bit floating-point DSP or better Input Impedance: ≥10 kΩ balanced Output Impedance: ≤200 Ω balanced Phantom Power: 48 V, individually selectable per input Crossover Range: Approx. 20 Hz–20 kHz Automatic Mixer: Built-in automatic mixing functionality Frequency Response: 20 Hz–20 kHz or better THD: ≤0.01% Acoustic Processing: Acoustic Feedback Control, Noise Control and Echo Control Dynamic Processing: Compressor, AGC and Limiter on each channel Input EQ: Minimum 31-band PEQ per input Output EQ: Minimum 10-band PEQ per output Control Interfaces: RJ45, USB, RS232, RS485 and GPIO Certifications: ROHS, MII, CE	Nos.	1
4.2	Digital Mixing Console	Nos.	1

	SITC of professional multi-bus digital audio mixer: System Type: Digital Audio Mixing Console Channels: Minimum 16 Mono + 1 Stereo + 2 FX Return Display: Minimum 9-inch multi-touch colour display Analog Inputs: Minimum 16 Mic/Line inputs Input Connectors: XLR and XLR/TRS combination connectors Analog Outputs: Minimum 8 balanced XLR outputs Dante: Minimum 16 × 16 Dante network audio I/O Sampling Rate: 48 kHz / 96 kHz Processing: 32-bit floating-point DSP or better Frequency Response: 20 Hz–20 kHz, +0.5/-1.0 dB or better THD: ≤0.01% Dynamic Range: ≥106 dB Signal Delay: ≤1.3 ms Power Supply: External AC adapter, 100–240 V AC, 50/60 Hz Power Consumption: Approximately 43 W or better Mounting: Desktop; rack-mount kit provision preferred Operating Temperature: 0–40°C Certifications: ROHS, MII		
5.0	MICROPHONE SYSTEMS & CHARGING HARDWARE		
5.1	Digital Wireless Quad Receiver Core SITC of multi-channel professional digital wireless main receiver framework: Type: Digital Wireless Microphone Receiver Capacity: Minimum 4 channels in a single chassis Display: LCD/LED display showing channel, RF and audio status Operating Frequencies: 2,402~2,480MHz	Nos.	2

	Dynamic Range: ≥ 120 dB, A-weighted, typical Harmonic Distortion: $< 0.05\%$, typical Simultaneous Channels: Standard: 10 channels, HD mode: 20 channels. Frequency Response: 20 Hz – 20 kHz or better Latency: ≤ 3 ms in Standard mode and ≤ 7 ms in HD mode Audio Sampling Rate: Standard: 24bit/48kHz HD mode: 24bit/48kHz Encryption: AES-128 or equivalent Certifications: ROHS, EU, CE		
5.2	Digital Wireless Handheld Microphone SITC of digital wireless handheld microphone system. Type: Digital Wireless Handheld Microphone Operating Frequencies: 2,402~2,480MHz Dynamic Range: ≥ 120 dB, A-weighted, typical Harmonic Distortion: $< 0.05\%$, typical Simultaneous Channels: Standard: 10 channels, HD mode: 20 channels. Frequency Response: 20 Hz – 20 kHz or better Latency: ≤ 3 ms in Standard mode and ≤ 7 ms in HD mode Audio Sampling Rate: Standard: 24bit/48kHz HD mode: 24bit/48kHz Encryption: AES-128 or equivalent Certifications: ROHS, EU, CE	Nos.	5
5.3	Wireless Body-Pack Transmitter with Lavalier SITC of digital wireless lavalier microphone. System Type: Digital Wireless Body-Pack Microphone System Transmitter Type: Body-Pack / Belt-Pack Digital Wireless Transmitter	Sets	2

	Operating Frequencies: 2,402~2,480MHz Dynamic Range: ≥120 dB, A-weighted, typical Harmonic Distortion: <0.05%, typical Simultaneous Channels: Standard: 10 channels, HD mode: 20 channels. Frequency Response: 20 Hz – 20 kHz or better Latency: ≤ 3 ms in Standard mode and ≤ 7 ms in HD mode Audio Sampling Rate: Standard: 24bit/48kHz HD mode: 24bit/48kHz Encryption: AES-128 or equivalent Microphone Type: Miniature Lavalier Condenser Microphone Polar Pattern: Cardioid Microphone Cable: Approximately 1.4 m permanently attached cable Microphone Connector: Locking 4-pin connector compatible with body-pack transmitter Controls: Power, mute and system/channel controls Certifications: ROHS, EU, CE		
5.4	Digital Wireless Gooseneck Microphone System Type: Digital Wireless Gooseneck Microphone System Transmitter Type: Desktop / Tabletop Wireless Transmitter Operating Frequencies: 2,402~2,480MHz Dynamic Range: ≥120 dB, A-weighted, typical Harmonic Distortion: <0.05%, typical Simultaneous Channels: Standard: 10 channels, HD mode: 20 channels. Frequency Response: 20 Hz – 20 kHz or better Latency: ≤ 3 ms in Standard mode and ≤ 7 ms in HD mode	Sets	1

	Audio Sampling Rate: Standard: 24bit/48kHz HD mode: 24bit/48kHz Encryption: AES-128 or equivalent Microphone Type: Condenser Gooseneck Microphone Polar Pattern: Cardioid Microphone Length: Approximately 480 mm Microphone Frequency Response: 30 Hz – 20 kHz or better Maximum SPL: ≥139 dB SPL Mute Function: Selectable mute operation, including touch-to-talk/touch-to-mute Output Connection: 3-pin XLRM microphone connection Certifications: ROHS, EU, CE		
5.5	Two-Bay Intelligent Charging Station System Type: 2-bay charging station Charging Capacity: Minimum 2 transmitters/receivers simultaneously Battery Type: Rechargeable NiMH batteries Input Power: 12 V DC, 3 A Charging Indication: Individual LED indication for power and charging status Operating Temperature: 0°C to 40°C or better Compatibility: Compatible with the proposed wireless microphone transmitter/receiver system Mounting: Desktop/tabletop charging station	Sets	2
6.0	VIDEO SIGNAL INTERFACING & LOGISTICAL ROUTING		
6.1	HDMI Distribution Amplifier SITC of rack-mountable ultra-high-definition HDMI Distribution Amplifier: System Type: HDMI Distribution Amplifier / Splitter HDMI Inputs: Minimum 2 × HDMI inputs HDMI Outputs: Minimum 8 × HDMI outputs	Nos.	1

	HDMI Version: HDMI 2.0b or better Video Bandwidth: Minimum 18 Gbps Maximum Resolution: Up to 4K UHD @ 60 Hz, 4:4:4, 8-bit HDR: HDR support HDCP: HDCP 2.2 compliant Switching: Auto and manual input selection Input Selection: Front-panel control, RS-232 and TCP/IP Analog Audio Output: Balanced/line-level L/R output Digital Audio Output: Optical S/PDIF Network: 10/100 Ethernet via RJ45 RS-232: DB9 or equivalent serial control interface HDMI Connector: HDMI Type-A HDMI Cable Distance: Suitable for 4K60 operation with appropriate high-speed HDMI cables Power Supply: 100–240 V AC, 50/60 Hz, external DC adapter Power Consumption: ≤15 W Certifications: CE, IC, FCC		
6.2	HDMI Wall Plate Extender Set (Transmitter/Receiver) SITC of architecturally concealed wall-plate signal extender transmitter (TX) and receiver (RX): System Type: HDMI over HDBaseT Wall-Plate Extender Set Configuration: 1 × Transmitter + 1 × Receiver HDMI Input: Minimum 1 × HDMI Type-A HDMI Output: Minimum 1 × HDMI Type-A Transmission Medium: Single Cat6/Cat6A twisted-pair cable HDBaseT: Supported Maximum Resolution: Up to 4K UHD 4K Transmission: 4K@60 Hz, 4:2:0 up to 40 m Full HD Transmission: 1080p up to 70 m	Nos.	1

	Video Bandwidth: Minimum 10.2 Gbps HDMI Standard: HDMI 1.4b or better HDCP: HDCP 2.2 compliant 4K Formats: 4K@30 Hz 4:4:4 and 4K@60 Hz 4:2:0 or better Mounting: Wall/flush mounting with suitable cover plate Operating Temperature: 0°C to 40°C or better Input Power: 100–240 V AC, 50/60 Hz power adapter Power Consumption: ≤10 W Certifications: CE, IC, FCC		
6.3	HDMI Extender Set SITC of professional Heavy-duty HDMI 2.0 HDBaseT signal converter transmitter and receiver point-to-point set over extended runs: System Type: HDMI Over HDBaseT Extender Set Configuration: 1 × Transmitter + 1 × Receiver HDMI Input: Minimum 1 × HDMI Type-A HDMI Output: Minimum 1 × HDMI Type-A Transmission Technology: HDBaseT over single twisted-pair cable Transmission Distance: Minimum 70 m for 1080p; minimum 40 m for 4K@60 Hz Cable: Solid-core shielded Cat6/Cat6A or better Maximum Resolution: Up to 4096 × 2160 @ 60 Hz 4K Format: 4K@60 Hz, 4:4:4, 8-bit Bandwidth: Minimum 18 Gbps compressed / 10.2 Gbps uncompressed HDMI Standard: HDMI 2.0 or better HDCP: HDCP 2.2 compliant Status Indication: Power/link/status diagnostic LEDs Power Supply: 100–240 V AC, 50/60 Hz input; approximately 18 V DC output Power Consumption: ≤13 W	Nos.	5

7.0	CABLING, CONDUITS & SERVER RACKS		
7.1	Cat 6 Patch Cables Cable Type: High-Speed HDMI Cable with Ethernet Length: 6 ft (approx. 1.83 m) Connector: HDMI Type-A Male to HDMI Type-A Male HDMI Standard: HDMI 2.0 / Premium High-Speed HDMI or better Bandwidth: 18 Gbps minimum Video Resolution: Up to 4K UHD @ 60 Hz Chroma Sampling: 0.169490740740741 HDR: HDR support HDCP: HDCP 2.2 or better Connector Plating: Gold-plated contact surfaces Audio: Support for all standard HDMI audio formats	Nos.	12
7.2	CAT6A Cable Cable Type: Category 6A F/UTP Shielded LAN Cable Construction: 4 twisted pairs with overall foil shield Conductor: 23 AWG solid annealed bare copper Number of Pairs: 4 Pairs / 8 Conductors Conductor Type: Solid copper Insulation: High-density polyethylene (HDPE) or better Shielding: Overall foil shield Frequency: Up to 500 MHz or better Category Standard: ANSI/TIA-568 Category 6A or equivalent Data Rate: Supports 10/100/1000 Mbps and 10GBASE-T Maximum Permanent Link: Up to 90 m, as per structured cabling standards PoE Support: Shall support IEEE 802.3af/at/bt PoE applications HDBaseT: Suitable for HDBaseT applications	Lot	1

	Jacket: Low-smoke/lead-free PVC or equivalent, suitable for installation Cable Length: 305 m / 1000 ft nominal or as per site requirement		
7.3	Connectors, Interconnecting Cables, PVC Conduits & Accessories Supply and Installation of bulk Cables and Connectors as per the requirements and AV rack for Auditorium Interconnecting Cables: Professional-grade cables suitable for audio, video, control and network interconnections as applicable to the complete system Audio Cables: Balanced shielded audio cable, 2-core/2-pair, 22–24 AWG or better, low capacitance, suitable for microphone/line-level signals Speaker Cables: 2-core stranded copper speaker cable, minimum 1.5 sq.mm / 2.5 sq.mm as required by load and distance, suitable for 70/100 V and low-impedance speaker systems HDMI Cables: High-Speed/Premium High-Speed HDMI cable, supporting minimum 18 Gbps, 4K @ 60 Hz, HDR, HDCP 2.2, Ethernet, ARC and CEC wherever required Audio Connectors: XLR, TRS, RCA, Euroblock/terminal block or equivalent as required Cable Management: Cable ties, Velcro straps, labels, glands, clips and other accessories required for a neat installation shall be included PVC Conduit: Rigid PVC conduit suitable for routing/protection of ELV, AV, control and communication cables Conduit Size: Minimum 20 mm or as required based on cable quantity and applicable fill requirements Conduit Accessories: Bends, elbows, couplers, junction boxes, inspection boxes, saddles, clips and other necessary accessories.	Lot	1
7.4	Server Equipment Rack Supply and Installation of AV Rack: Type: 19-inch floor-standing network/AV rack Front Door: Lockable toughened glass/acrylic or perforated metal door	Nos.	1

	Rear Door: Lockable steel/perforated steel door Side Panels: Removable lockable side panels Cable Entry: Cable entry provisions at top and bottom Mobility: Heavy-duty castors, minimum 4 nos., with locking/braking arrangement Ventilation: Ventilated top/bottom and suitable fan mounting provision Horizontal Cable Organizer: 1U, 19-inch rack-mountable, loop/finger type, suitable for organized routing of patch/network/AV cables Rack Shelf: 19-inch rack-mountable fixed shelf, Rack PDU: 19-inch rack-mountable, 2U, single-phase, 230 V AC, 50/60 Hz PDU Rating: 8 A minimum with suitable overload protection PDU Sockets: Minimum 12 × Indian round-pin 5 A sockets Rack Air Circulation Module: Rack/tower-mounted cooling fan module suitable for 19-inch rack installation Airflow: Minimum 180 CFM Cable Management: Provision for vertical/horizontal cable routing and segregation Accessories: All brackets, screws, nuts, washers, cable-management accessories		
8.0	INSTALLATION, TESTING & COMMISSIONING SERVICES		
8.1	On-Site Setup, Calibration, Acoustic Tuning & Commissioning Professional Installation, Inter-Vendor Coordination, Testing & Commissioning Comprehensive engineering services scope encompassing: Full mounting, dressing, and cable routing strictly within the Bank's existing concealed conduits as verified by mandatory site pre-checks. Mandatory coordination with the separate Display/LED vendor for audio extraction, de-embedding calibration, and multi-channel system tuning.	LS	1

	Lip-sync/latency time-alignment tuning, acoustic tuning, EQ optimization, gain staging, and formal hand-over training for Bank operators.		
9	Total Amount		
10	Total Amount including GST (A)		
11	Comprehensive Annual Maintenance Service Contract		
11.1	Charges for Comprehensive Annual Maintenance Contract for all the Audio and Video Equipment's per year (B)	Per Annum	LS

Note: Part II (Price Bid) (Not to be Quoted here, as the bidding is through CPP portal, bidders are required to fill the rates in the portal only)

The Content of the letter should not be altered. If any addition or deletion or modification in the content of this letter submitted by the tenderer is noticed, the tender is liable for rejection.



**Reserve Bank of India
Estate Department
Hyderabad**

Supply, Installation, Testing and Commissioning of Audio & Video system at Auditorium in Bank's Office Building at Reserve Bank of India (RBI), Hyderabad

e-Tender ID : 2026_RBI_292671_1

Part -II

Name of Contractor_____

Address _____

Preamble

The rates quoted shall include the following:

1. The item and quantities indicated in the schedule of quantity are tentative and as per need of work and as decided by the Bank certain items/ quantities may not be required to be executed or may be executed with reduction in quantities to any extent. The contractor must execute items/quantities as per direction of Bank and no claim on this account whatsoever it may be entertained by the Bank in respect of non-operation of items / reduction in quantities.
2. Charges required to comply with all the provision under contract labor Act 1970 (including subsequent revision if any) and rules therein.
3. Providing for all costs and charges incurred by the contractor complying with all safety health and welfare regulations, appertaining to staff and work people employed on the site.
4. Keeping the site free from debris arising from the works during the renovation/construction/repair/ period and leave the site free from debris on completion of work to the satisfaction of the Employer.
5. Providing electric lights, maintain system, all as required for the works and remove the temporary installations on completion.
6. Making necessary holes/pockets/chases in masonry/ concrete/floors/walls/ partition etc. and making good the damages matching to the surrounding specification at no extra cost to the Bank.
7. Providing and erecting necessary scaffolding and providing access for work area as may be required for carrying out the repair works and for inspection of work at all levels and heights and removal the same after satisfactory completion of work.
8. Charges for Inspecting the site and get acquainted with pertaining works just idea for works to be carried out before quoting the rates.
9. Necessary charges towards providing service of a qualified supervisor on the work site during entire working hours and who shall be available at work site to receive instructions from the Bank and act accordingly.
10. Bidders will have to submit a time bound programme just after the award of the work and get it approved from the Bank before commencement of work.
11. The rates shall also include the removal and carting away all debris, etc from Bank's premises.

12. Bidders to provide the original invoices for every supply of materials for Bank's verifications. If it is not provided and the materials found not as per specifications/ approved make shall not be measured for the payment.

13. Curing the items of work involving the use of cement and waterproof paints.

14. The rates should be inclusive of all relevant taxes, GST, INSURANCE transportation charge etc. and for all the accessories required for the completion of the work. No extra amount will be paid for whatsoever. All fluctuations in prices of all materials & labor shall be borne by the contractor.

Place:

Signature and Seal of the contractor

Name & address

Price Bid

SCHEDULE OF QUANTITIES

Item No.	Technical Specifications	Unit	Qty	Unit Rate (INR)	Total Amount (INR)
1.0	Indoor Active LED Display				
1.1	Supply, installation, testing and commissioning (SITC) of Indoor Active LED Display LED Display Size: 11.54 feet (width) X 6.82 feet (Height) = 78.7 Sq. feet Diagonal Size: 163 inches; 16:9 Aspect Ratio Pixel Pitch: 1.8 mm or less Pixel density: 289050 dots/m ² or higher LED Type: Fully Flip Chip COB Module Size: 320X160 mm Ingress Protection: Front: IP54 Brightness: ≥ 700 cd/m ² Brightness Control: Manual/automatic Colour Temperature: 1000K-9500K Adjustable or higher Horizontal Viewing Angle: ≥160° Vertical Viewing Angle: ≥ 160° Contrast Raio: minimum 10000:1 Input Power <Max>: 285 W/m ² Input Power< Typical>: 130 W/m ² Refresh Rate: ≥ 7680 Hz Input Power Frequency: 50-60Hz or more LED lifetime hours: 1,00,000 Hours Certificate: BIS	Nos.	1		

1.2	Supply, installation, testing and commissioning of All-in-one LED Controller Type: 2-in-1 LED Display Controller Inputs: 2xHDMI, 1x DVI/DP Port, 1x USB and Optional Display Port 1.2 or 12G-SDI Input Resolution: Support up to 4K × 2K @ 60 Hz Ethernet Ports: Minimum of 6 x 1/10/100/1000 Gigabit Ethernet Fiber Interface: Minimum 2 × optical fiber interfaces Cascading: Shall support controller cascading/loop-back functionality for system expansion and redundancy EDID Management: Shall support EDID management/configuration for connected video sources Control: Multiple control methods shall be supported through suitable software/hardware interfaces Power Supply: 100–240 VAC, 50/60 Hz or suitable universal AC power input Accessories: All required power cables, communication cables, software and standard accessories shall be supplied Certifications: ROHS, CE	Nos.	1		
2.0	Audio Auditorium				
2.1	Main Auditorium Front Loudspeaker SITC of Passive 2-way full range point source speaker with coaxial driver arrangement: Type: Passive 2-Way full-range coaxial point-source loudspeaker Frequency Response: 60 Hz to 20 kHz or better Power Handling: Minimum 150 W AES Peak Power: Minimum 600 W Peak Sensitivity: Minimum 96 dB @ 1 W/1 m	Nos.	4		

	Maximum SPL: 116dB continuous or better Nominal Impedance: 8Ω Low Frequency Driver: 10" (250 mm) Low-Mid driver with coaxial entry or more High Frequency Driver: 1" (25 mm) voice coil compression driver mounted coaxially Dispersion: 90° conical or better / equivalent uniform coverage Connector: 2 x Speakon Certifications: ROHS, MII,CE				
2.2	Dual 10" In-Wall Subwoofer System SITC of Dual 10-inch high-performance in-wall subwoofer system: Type: Professional passive in-wall / on-wall subwoofer system Frequency Response: 38 Hz to 500 Hz or better Power Handling: Minimum 500 W AES Peak Power: Minimum 2000 W Peak Sensitivity: Minimum 95.5 dB @ 1 W/1 m Maximum SPL: Minimum 122 dB continuous or better Nominal Impedance: 4Ω Dispersion: 170° horizontal, 90° vertical @ 400Hz or better LF Driver: 2 x 10" (250 mm) long throw weather resistant woofer Certifications: ROHS, MII ,CE	Nos.	2		
2.3	Passive 12" Stage Monitor Loudspeaker SITC of Passive 12-inch 2-way full range stage floor monitor: Type: Passive 2-Way full-range coaxial point-source loudspeaker Frequency Response: 55 Hz to 20 kHz or better	Nos.	2		

	Power Handling: Minimum 250 W AES Peak Power: Minimum 1000 W peak Sensitivity: Minimum 98 dB @ 1 W/1 m Maximum SPL (Continuous): Minimum 122 dB continuous @ 1 m Nominal Impedance: 8Ω Dispersion: 60° conical LF Driver: 12"Coaxial LF driver,1" (coaxially mounted HF compression driver HF Driver: 1" exit compression driver, coaxially mounted Crossover: Passive 2-way crossover Connector: 2 x Speakon connector Certifications: ROHS, MII ,CE				
2.4	Passive 10" Control Room Monitor Speaker. SITC of Passive 10-inch 2-way local monitoring speaker: Type: Passive 2-way coaxial cinema surround loudspeaker Frequency Response: 65 Hz to 20 kHz or better Power Handling: Minimum 150 W AES Peak Power: Minimum 600 W peak Sensitivity: Minimum 96 dB @ 1 W/1 m Maximum SPL: Minimum 118 dB continuous / 124 dB peak @ 1 m Nominal Impedance: 8Ω LF Driver: Minimum 10" (250 mm) Low-Mid / Low-Frequency driver HF Driver: Minimum 1" (25 mm) voice-coil compression driver Crossover Frequency: Approximately 2.5 kHz Dispersion: Approximately 90° conical	Nos.	1		

	Connector: 2 x Speakon connector Certifications: ROHS, MII ,CE				
3.0	POWER AMPLIFIERS				
3.1	6-Channel Professional Power Amplifier SITC of high-efficiency multi-channel installation power amplifier: No. of Channels: 6 Output Power (per channel): Minimum 200 W/ Channel @ 8Ω, Minimum 300 W/ Channel @ 4Ω Frequency Response: 30 Hz – 20 kHz or better Total Harmonic Distortion + Noise: ≤ 0.01% at rated operating conditions Intermodulation Distortion: ≤ 0.02% SMPTE or better Signal to Noise Ratio: ≥ 95 dB Damping factor: >100 @ 8 Ω Crosstalk: ≤ -90 dB Slew Rate: ≥ 50 V/μs Input Sensitivity: Approximately 1.3 V RMS / +5 dBu Input Impedance: 20 kΩ balanced or better Voltage Gain: Approximately 29 dB Bandwidth : ≥100 kHz Power requirement: 230–240 V AC, 50–60 Hz Inputs: Balanced audio input for each channel Outputs: Professional Speakon/NL4 Certifications: ROHS, MII, CE	Nos.	1		
3.2	4-Channel Professional Power Amplifier SITC of multi-channel installation power amplifier: No. of Channels: 4	Nos.	1		

	Output Power (per channel): Minimum 200 W/Channel @ 8Ω, Minimum 300 W/Channel @ 4Ω Frequency Response: 30 Hz – 20 kHz or better Total Harmonic Distortion + Noise: ≤ 0.01% at rated operating conditions Intermodulation Distortion: ≤ 0.02% SMPTE or better Signal to Noise Ratio: ≥ 95 dB Damping factor: >100 @ 8 Ω Crosstalk: ≤ -90 dB Slew Rate: ≥ 50 V/μs Input Sensitivity: Approximately 1.3 V RMS / +5 dBu Input Impedance: 20 kΩ balanced or better Voltage Gain: Approximately 29 dB Bandwidth: 100 kHz or better Protection: Short-circuit, ultrasonic/RF and thermal protection Load Protection: Turn-on delay and DC fault protection Subsonic filter: 30 Hz / 100 Hz selectable or equivalent Power requirement: 230–240 V AC, 50–60 Hz Inputs: Phoenix/Euroblock or equivalent Outputs: NL4 Speakon or equivalent Certifications: ROHS, MII ,CE				
3.3	2-Channel Power Amplifier SITC of heavy-duty 2-channel amplifier with bridge capability: No. of Channels: 2 Output Power (per channel): Minimum 500 W/channel @ 8 Ω and 750 W/channel @ 4 Ω	Nos.	1		

	Bridge Output: Minimum 1,400 W @ 8 Ω Frequency Response: 20 Hz – 20 kHz, ± 0.2 dB or better THD: $\leq 0.05\%$, 20 Hz–20 kHz at rated power IMD: $\leq 0.01\%$ or better Signal-to-Noise / Hum & Noise: ≥ 105 dB or better Damping Factor: ≥ 200 @ 8 Ω Input Sensitivity: Approximately 1.3 V RMS or better Bandwidth: ≥ 100 kHz Slew Rate: ≥ 50 V/μs Rise Time: ≤ 2 μs Input Impedance: ≥ 20 kΩ, balanced Protection: Short-circuit, thermal, DC fault, ultrasonic/RF and overload protection Cooling: Forced-air cooling, front-to-rear Power: 230 - 240 VAC, 50-60 Hz Certifications: ROHS, MII, CE				
4.0	DIGITAL MIXING & SIGNAL PROCESSING SYSTEMS				
4.1	Digital Signal Processor (DSP) SITC of centralized matrix DSP core with internal multi-channel network audio: System Type: Digital Signal Processor Analog I/O: Minimum 8 Analog Inputs $\times$ 8 Analog Outputs Network Audio: Dante-enabled, minimum 4 $\times$ 4 network audio channels A/D & D/A: 24-bit Sampling Frequency: 48 kHz DSP: 32-bit floating-point DSP or better Input Impedance: ≥ 10 kΩ balanced	Nos.	1		

	Output Impedance: $\leq 200 \Omega$ balanced Phantom Power: 48 V, individually selectable per input Crossover Range: Approx. 20 Hz–20 kHz Automatic Mixer: Built-in automatic mixing functionality Frequency Response: 20 Hz–20 kHz or better THD: $\leq 0.01\%$ Acoustic Processing: Acoustic Feedback Control, Noise Control and Echo Control Dynamic Processing: Compressor, AGC and Limiter on each channel Input EQ: Minimum 31-band PEQ per input Output EQ: Minimum 10-band PEQ per output Control Interfaces: RJ45, USB, RS232, RS485 and GPIO Certifications: ROHS, MII, CE				
4.2	Digital Mixing Console SITC of professional multi-bus digital audio mixer: System Type: Digital Audio Mixing Console Channels: Minimum 16 Mono + 1 Stereo + 2 FX Return Display: Minimum 9-inch multi-touch colour display Analog Inputs: Minimum 16 Mic/Line inputs Input Connectors: XLR and XLR/TRS combination connectors Analog Outputs: Minimum 8 balanced XLR outputs Dante: Minimum 16 × 16 Dante network audio I/O Sampling Rate: 48 kHz / 96 kHz	Nos.	1		

	Processing: 32-bit floating-point DSP or better Frequency Response: 20 Hz–20 kHz, +0.5/-1.0 dB or better THD: ≤0.01% Dynamic Range: ≥106 dB Signal Delay: ≤1.3 ms Power Supply: External AC adapter, 100–240 V AC, 50/60 Hz Power Consumption: Approximately 43 W or better Mounting: Desktop; rack-mount kit provision preferred Operating Temperature: 0–40°C Certifications: ROHS, MII				
5.0	MICROPHONE SYSTEMS & CHARGING HARDWARE				
5.1	Digital Wireless Quad Receiver Core SITC of multi-channel professional digital wireless main receiver framework: Type: Digital Wireless Microphone Receiver Capacity: Minimum 4 channels in a single chassis Display: LCD/LED display showing channel, RF and audio status Operating Frequencies: 2,402~2,480MHz Dynamic Range: ≥120 dB, A-weighted, typical Harmonic Distortion: <0.05%, typical Simultaneous Channels: Standard: 10 channels, HD mode: 20 channels. Frequency Response: 20 Hz – 20 kHz or better Latency: ≤ 3 ms in Standard mode and ≤ 7 ms in HD mode	Nos.	2		

	Audio Sampling Rate: Standard: 24bit/48kHz HD mode: 24bit/48kHz Encryption: AES-128 or equivalent Certifications: ROHS, EU, CE				
5.2	Digital Wireless Handheld Microphone SITC of digital wireless handheld microphone system. Type: Digital Wireless Handheld Microphone Operating Frequencies: 2,402~2,480MHz Dynamic Range: ≥120 dB, A-weighted, typical Harmonic Distortion: <0.05%, typical Simultaneous Channels: Standard: 10 channels, HD mode: 20 channels. Frequency Response: 20 Hz – 20 kHz or better Latency: ≤ 3 ms in Standard mode and ≤ 7 ms in HD mode Audio Sampling Rate: Standard: 24bit/48kHz HD mode: 24bit/48kHz Encryption: AES-128 or equivalent Certifications: ROHS, EU, CE	Nos.	5		
5.3	Wireless Body-Pack Transmitter with Lavalier SITC of digital wireless lavalier microphone. System Type: Digital Wireless Body-Pack Microphone System Transmitter Type: Body-Pack / Belt-Pack Digital Wireless Transmitter Operating Frequencies: 2,402~2,480MHz Dynamic Range: ≥120 dB, A-weighted, typical Harmonic Distortion: <0.05%, typical Simultaneous Channels: Standard: 10 channels,	Sets	2		

	HD mode: 20 channels. Frequency Response: 20 Hz – 20 kHz or better Latency: ≤ 3 ms in Standard mode and ≤ 7 ms in HD mode Audio Sampling Rate: Standard: 24bit/48kHz HD mode: 24bit/48kHz Encryption: AES-128 or equivalent Microphone Type: Miniature Lavalier Condenser Microphone Polar Pattern: Cardioid Microphone Cable: Approximately 1.4 m permanently attached cable Microphone Connector: Locking 4-pin connector compatible with body-pack transmitter Controls: Power, mute and system/channel controls Certifications: ROHS, EU, CE				
5.4	Digital Wireless Gooseneck Microphone System Type: Digital Wireless Gooseneck Microphone System Transmitter Type: Desktop / Tabletop Wireless Transmitter Operating Frequencies: 2,402~2,480MHz Dynamic Range: ≥120 dB, A-weighted, typical Harmonic Distortion: <0.05%, typical Simultaneous Channels: Standard: 10 channels, HD mode: 20 channels. Frequency Response: 20 Hz – 20 kHz or better Latency: ≤ 3 ms in Standard mode and ≤ 7 ms in HD mode Audio Sampling Rate: Standard: 24bit/48kHz HD mode: 24bit/48kHz	Sets	1		

	Encryption: AES-128 or equivalent Microphone Type: Condenser Gooseneck Microphone Polar Pattern: Cardioid Microphone Length: Approximately 480 mm Microphone Frequency Response: 30 Hz – 20 kHz or better Maximum SPL: ≥139 dB SPL Mute Function: Selectable mute operation, including touch-to-talk/touch-to-mute Output Connection: 3-pin XLRM microphone connection Certifications: ROHS, EU, CE				
5.5	Two-Bay Intelligent Charging Station System Type: 2-bay charging station Charging Capacity: Minimum 2 transmitters/receivers simultaneously Battery Type: Rechargeable NiMH batteries Input Power: 12 V DC, 3 A Charging Indication: Individual LED indication for power and charging status Operating Temperature: 0°C to 40°C or better Compatibility: Compatible with the proposed wireless microphone transmitter/receiver system Mounting: Desktop/tabletop charging station	Sets	2		
6.0	VIDEO SIGNAL INTERFACING & LOGISTICAL ROUTING				
6.1	HDMI Distribution Amplifier SITC of rack-mountable ultra-high-definition HDMI Distribution Amplifier: System Type: HDMI Distribution Amplifier / Splitter HDMI Inputs: Minimum 2 × HDMI inputs	Nos.	1		

	HDMI Outputs: Minimum 8 × HDMI outputs HDMI Version: HDMI 2.0b or better Video Bandwidth: Minimum 18 Gbps Maximum Resolution: Up to 4K UHD @ 60 Hz, 4:4:4, 8-bit HDR: HDR support HDCP: HDCP 2.2 compliant Switching: Auto and manual input selection Input Selection: Front-panel control, RS-232 and TCP/IP Analog Audio Output: Balanced/line-level L/R output Digital Audio Output: Optical S/PDIF Network: 10/100 Ethernet via RJ45 RS-232: DB9 or equivalent serial control interface HDMI Connector: HDMI Type-A HDMI Cable Distance: Suitable for 4K60 operation with appropriate high-speed HDMI cables Power Supply: 100–240 V AC, 50/60 Hz, external DC adapter Power Consumption: ≤15 W Certifications: CE, IC, FCC				
6.2	HDMI Wall Plate Extender Set (Transmitter/Receiver) SITC of architecturally concealed wall-plate signal extender transmitter (TX) and receiver (RX): System Type: HDMI over HDBaseT Wall-Plate Extender Set Configuration: 1 × Transmitter + 1 × Receiver HDMI Input: Minimum 1 × HDMI Type-A HDMI Output: Minimum 1 × HDMI Type-A	Nos.	1		

	Transmission Medium: Single Cat6/Cat6A twisted-pair cable HDBaseT: Supported Maximum Resolution: Up to 4K UHD 4K Transmission: 4K@60 Hz, 4:2:0 up to 40 m Full HD Transmission: 1080p up to 70 m Video Bandwidth: Minimum 10.2 Gbps HDMI Standard: HDMI 1.4b or better HDCP: HDCP 2.2 compliant 4K Formats: 4K@30 Hz 4:4:4 and 4K@60 Hz 4:2:0 or better Mounting: Wall/flush mounting with suitable cover plate Operating Temperature: 0°C to 40°C or better Input Power: 100–240 V AC, 50/60 Hz power adapter Power Consumption: ≤10 W Certifications: CE, IC, FCC				
6.3	HDMI Extender Set SITC of professional Heavy-duty HDMI 2.0 HDBaseT signal converter transmitter and receiver point-to-point set over extended runs: System Type: HDMI Over HDBaseT Extender Set Configuration: 1 × Transmitter + 1 × Receiver HDMI Input: Minimum 1 × HDMI Type-A HDMI Output: Minimum 1 × HDMI Type-A Transmission Technology: HDBaseT over single twisted-pair cable Transmission Distance: Minimum 70 m for 1080p; minimum 40 m for 4K@60 Hz Cable: Solid-core shielded Cat6/Cat6A or better	Nos.	5		

	Maximum Resolution: Up to 4096 × 2160 @ 60 Hz 4K Format: 4K@60 Hz, 4:4:4, 8-bit Bandwidth: Minimum 18 Gbps compressed / 10.2 Gbps uncompressed HDMI Standard: HDMI 2.0 or better HDCP: HDCP 2.2 compliant Status Indication: Power/link/status diagnostic LEDs Power Supply: 100–240 V AC, 50/60 Hz input; approximately 18 V DC output Power Consumption: ≤13 W				
7.0	CABLING, CONDUITS & SERVER RACKS				
7.1	Cat 6 Patch Cables Cable Type: High-Speed HDMI Cable with Ethernet Length: 6 ft (approx. 1.83 m) Connector: HDMI Type-A Male to HDMI Type-A Male HDMI Standard: HDMI 2.0 / Premium High-Speed HDMI or better Bandwidth: 18 Gbps minimum Video Resolution: Up to 4K UHD @ 60 Hz Chroma Sampling: 0.169490740740741 HDR: HDR support HDCP: HDCP 2.2 or better Connector Plating: Gold-plated contact surfaces Audio: Support for all standard HDMI audio formats	Nos.	12		
7.2	CAT6A Cable Cable Type: Category 6A F/UTP Shielded LAN Cable	Lot	1		

	Construction: 4 twisted pairs with overall foil shield Conductor: 23 AWG solid annealed bare copper Number of Pairs: 4 Pairs / 8 Conductors Conductor Type: Solid copper Insulation: High-density polyethylene (HDPE) or better Shielding: Overall foil shield Frequency: Up to 500 MHz or better Category Standard: ANSI/TIA-568 Category 6A or equivalent Data Rate: Supports 10/100/1000 Mbps and 10GBASE-T Maximum Permanent Link: Up to 90 m, as per structured cabling standards PoE Support: Shall support IEEE 802.3af/at/bt PoE applications HDBaseT: Suitable for HDBaseT applications Jacket: Low-smoke/lead-free PVC or equivalent, suitable for installation Cable Length: 305 m / 1000 ft nominal or as per site requirement				
7.3	Connectors, Interconnecting Cables, PVC Conduits & Accessories Supply and Installation of bulk Cables and Connectors as per the requirements and AV rack for Auditorium Interconnecting Cables: Professional-grade cables suitable for audio, video, control and network interconnections as applicable to the complete system Audio Cables: Balanced shielded audio cable, 2-core/2-pair, 22–24 AWG or better, low capacitance, suitable for microphone/line-level signals Speaker Cables: 2-core stranded copper speaker cable, minimum 1.5 sq.mm / 2.5 sq.mm as	Lot	1		

	required by load and distance, suitable for 70/100 V and low-impedance speaker systems HDMI Cables: High-Speed/Premium High-Speed HDMI cable, supporting minimum 18 Gbps, 4K @ 60 Hz, HDR, HDCP 2.2, Ethernet, ARC and CEC wherever required Audio Connectors: XLR, TRS, RCA, Euroblock/terminal block or equivalent as required Cable Management: Cable ties, Velcro straps, labels, glands, clips and other accessories required for a neat installation shall be included PVC Conduit: Rigid PVC conduit suitable for routing/protection of ELV, AV, control and communication cables Conduit Size: Minimum 20 mm or as required based on cable quantity and applicable fill requirements Conduit Accessories: Bends, elbows, couplers, junction boxes, inspection boxes, saddles, clips and other necessary accessories.				
7.4	Server Equipment Rack Supply and Installation of AV Rack: Type: 19-inch floor-standing network/AV rack Front Door: Lockable toughened glass/acrylic or perforated metal door Rear Door: Lockable steel/perforated steel door Side Panels: Removable lockable side panels Cable Entry: Cable entry provisions at top and bottom Mobility: Heavy-duty castors, minimum 4 nos., with locking/braking arrangement Ventilation: Ventilated top/bottom and suitable fan mounting provision Horizontal Cable Organizer: 1U, 19-inch rack-mountable, loop/finger type, suitable for organized routing of patch/network/AV cables	Nos.	1		

	Rack Shelf: 19-inch rack-mountable fixed shelf, Rack PDU: 19-inch rack-mountable, 2U, single-phase, 230 V AC, 50/60 Hz PDU Rating: 8 A minimum with suitable overload protection PDU Sockets: Minimum 12 × Indian round-pin 5 A sockets Rack Air Circulation Module: Rack/tower-mounted cooling fan module suitable for 19-inch rack installation Airflow: Minimum 180 CFM Cable Management: Provision for vertical/horizontal cable routing and segregation Accessories: All brackets, screws, nuts, washers, cable-management accessories				
8.0	INSTALLATION, TESTING & COMMISSIONING SERVICES				
8.1	On-Site Setup, Calibration, Acoustic Tuning & Commissioning Professional Installation, Inter-Vendor Coordination, Testing & Commissioning Comprehensive engineering services scope encompassing: Full mounting, dressing, and cable routing strictly within the Bank's existing concealed conduits as verified by mandatory site pre-checks. Mandatory coordination with the separate Display/LED vendor for audio extraction, de-embedding calibration, and multi-channel system tuning. Lip-sync/latency time-alignment tuning, acoustic tuning, EQ optimization, gain staging, and formal hand-over training for Bank operators.	LS	1		
9	Total Amount				
10	Total Amount including GST (A)				
11	Comprehensive Annual Maintenance Service Contract				

11.1	Charges for Comprehensive Annual Maintenance Contract for all the Audio and Video Equipment's per year (B)	Per Annum	LS		
Total Cost of Ownership = A + (1.56 x B), tenders shall be evaluated on the above formula based on capital cost of the system and considering the effect of comprehensive annual maintenance service charges (CAMSC) for 04 years in addition to one-year DLP.					

Note: Part II (Price Bid) (Not to be Quoted here, as the bidding is through CPP portal, bidders are required to fill the rates in the portal only)

The Content of the letter should not be altered. If any addition or deletion or modification in the content of this letter submitted by the tenderer is noticed, the tender is liable for rejection.