



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.



**STATE BANK OF INDIA**

ESTATE DEPARTMENT

CORPORATE CENTRE, NINTH FLOOR, STATE BANK BHAVAN,  
MADAME CAMA ROAD, NARIMAN POINT, MUMBAI-21

***PART – A: TECHNICAL BID***

***(TENDER ID – ESTATE/24-25/TCNWS/01)***

**TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED SERVICES WORKS IN EXISTING AV SET-UP OF THE AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.**

**TENDER SUBMITTED BY:**

**NAME** : \_\_\_\_\_  
**ADDRESS** : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
**GSTIN NO.** : \_\_\_\_\_  
**DATE** : \_\_\_\_\_



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

## NOTICE INVITING TENDERS

TENDER ID - ESTATE/23-24/.....

### TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED SERVICES WORKS IN EXISTING AV SET-UP OF THE AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

SBI invites “Tender for System Integrators for Supply, Installation, Testing and Commissioning of New active LED wall by replacing the Old video wall, Additional Microphones & allied Services works in existing AV set-up of the Auditorium of State Bank of India, SB Bhavan, Madame Cama Road, Nariman Point, Mumbai” through Government e-Marketplace (GeM) Portal to quote for this tender.

Details of the tenders are as under:

SN	Particulars	Details
1	Name of work	Tender for System Integrators for Supply, Installation, Testing and Commissioning of New active LED wall by replacing the Old video wall, Additional Microphones & allied Services works in existing AV set-up of the Auditorium of State Bank of India at SB Bhavan, Madame Cama Road, Nariman Point, Mumbai.
2	Nature of Work	Supply, Installation, Testing and Commissioning of New active LED wall by replacing the Old video wall, Additional Microphones & allied Services works.
3	Time allowed for completion	<b>4 Months</b> from the date Purchase order/ Work Order.
4	Cost of Tender document cum Tender Processing Fee (Non-refundable)	<b>Nil</b>
5	Earnest Money Deposit	<b>Rs. 2,70,000/- (Rupees Two Lakhs, Seventy Thousand Only)</b> by means of online payment over GeM portal. <b>(MSME registered firms will have waiver for submission of EMD as per conditions mentioned in tender however, they have to pay transaction fee for GeM Portal in manner as mentioned below)</b>  All MSMEs firms having registration as per provisions of the Government of India Policy i.e. registration with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries



		Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or directorate of Handicrafts and Handlooms or Udyog Aadhaar Memorandum or any other body specified by Ministry of MSME will be exempted from submission of EMD. The firm must have a valid registration under relevant category failing which their bid will be rejected. The firm must enclosed all relevant documents while submitting the bid.
6	Initial Security Deposit (ISD)	2% of contract amount including EMD.
7	Date of availability of tender documents on GeM portal.	
	(a) Technical Bid	02/09/2024 to 23/09/2024
	(b) Price Bid	02/09/2024 to 23/09/2024
	(c) Last date and time for receipt of written queries for clarification from bidders for Pre-bid meeting.	<b>On or before 09.09.2024 up to 03.00 pm.</b> <b>(Pre-bid Queries to submitted on <a href="mailto:tcnws.helpdesk@sbi.co.in">tcnws.helpdesk@sbi.co.in</a> only). Queries received after 09.09.2024: 3.00 pm will not be entertained.</b>  Note: The intended bidders, along with queries have to mail the details of authorized representative viz name, mobile no., e-mail id along with authorization letter from the bidder.
8	Date of Pre-bid meeting and address of Pre-bid meeting	On 12/09/2024 at 3.00 PM. Office of The Deputy General Manager 9th Floor, Estate Dept., State Bank Bhavan, Madame Cama Road, Nariman Point, Mumbai – 400 021.  (Max. Two representatives per bidder will be allowed to participate). (Only written queries submitted by the bidders till stipulated date and time will be discussed and clarified in the meeting).
9	Last date & time for submission of EMD	23/09/2024 by 3:00 PM Note: It is sole responsibility of the bidder to ensure submission of their EMD with tender document by stipulated date and time at specified address failing which they will be disqualified.
10	Last date & time for submission of Technical and price bid	23/09/2024 by 3:00 PM
11	Date and Time of opening of Online Technical Bid	23/09/2024 by 3:30 PM
12	Date and Time of opening of Price Bid	Will be announced after opening and scrutiny of Technical Bid to technically qualified Vendors only.
13	Defects Liability period	3 year from the date of completion as per tender. Kindly refer the tender BOQ for more clarity



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

14	Liquidated Damages	0.50% per week subject to maximum of 5% of contract value for the delay in completion of work.
15	Validity of offer	<b>Six Months</b> from the date of opening of Price-bid
16	Value of Interim Certificate	<b>30 lakh, for all the works except the video wall &amp; microphones for which relevant clause no. 45 of General condition of contract will be applicable.</b>

17. No conditions other than mentioned in the tender will be considered, and if given they will have to be withdrawn before opening of the price-bid.

18. The SBI reserve their rights to accept or reject any or all the tenders, either in whole or in part without assigning any reason for doing so and any claim / correspondence shall be entertained in this regard.

19. Tenders received without EMD and Cost of Tender Documents shall be summarily rejected and such tenders shall not be allowed to participate in the online price bidding process. **Bidders who intend to get exemption from submission of Tender fee/EMD shall submit confirmation letter whether they are registered as MSE under MSME Act or not and if yes, then relevant copies of the registration letter need to be enclosed.**

20. In case the date of opening of tenders is declared as a holiday, the tenders will be opened on the next working day at the same time.

Yours faithfully,

**Deputy General Manager (Estate)**



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

### LETTER OF UNDERTAKING

To,  
The Deputy General Manager,  
State Bank of India,  
Corporate Centre, Ninth Floor,  
State bank Bhavan, Madam Cama road,  
Nariman Point, Mumbai 400 021.

Dear Sir,

Having examined the drawings, specification, design and schedule of quantities relating to the works specified in the memorandum hereinafter set out and having visited and examined the site of the works specified in the said memorandum 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 at the rates mentioned in the attached Schedule of Quantities and in accordance in all respects with the specifications, design, drawings and instructions in writing referred to in conditions of tender, the Articles of Agreement, Special Conditions, Schedule of Quantities and Conditions of Contract 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 work	Tender for System Integrators for Supply, Installation, Testing and Commissioning of New active LED wall by replacing the Old video wall, Additional Microphones & allied Civil, Interior & Services works in existing AV set-up for Auditorium of State Bank of India at SB Bhavan, Madame Cama Road, Nariman Point, Mumbai.
(b)	Earnest Money	<b>Rs. 2,70,000/- (Rupees Two Lakhs, Seventy Thousand Only)</b> by means of Demand Draft / Pay Order (Valid for a period of 90 Days from the last date of submission of the tender) from any scheduled Nationalized Bank drawn in favor of State Bank of India and payable at Mumbai. <b>(MSME registered firms will have waiver for submission of tender fee &amp; EMD as per conditions mentioned in tender).</b> All MSMEs firms having registration as per provisions of the Government of India Policy i.e. registration with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or directorate of Handicrafts and Handlooms or Udyog Aadhaar Memorandum or any other body specified by Ministry of MSME will be exempted from submission of EMD and Tender fee. The firm must have a valid registration under relevant category failing which their bid will be rejected. The firm must enclosed all relevant documents while submitting the bid.
(c)	Time allowed for completion of the Works	<b>4 Months</b> from the date of purchase order / work order.



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

- 1) Should this tender be accepted, I/we hereby agree to abide by and fulfill the terms and provisions of the said conditions of contract annexed hereto so far as may be applicable or in default thereof to forfeit and pay to SBI, the amount mentioned in the said contract.
- 2) I / We have deposited a sum of **Rs. 2,70,000/- (Rupees Two Lakhs, Seventy Thousand Only)** as Earnest Money with the SBI which amount is not to bear any interest. Should I / We fail to execute the Contract when called upon to do so I / We do hereby agree that this sum shall be forfeited by me/us to SBI.

Further, under any circumstances, whatsoever, if I/We fail to comply the same including compliance of any such other conditions of tender within the stipulated time. I /We hereby, authorized SBI to cancel my/our tender, to forfeit my EMD and to take further necessary action as deemed fit including debarring our firm from participating in SBI future tenders/de-paneling etc.

- 3) I/ We understand that as per terms of this tender, the SBI may consider accepting our tender in part or whole or may entrust the various work proposed in phases. We, therefore, undertake that we shall not raise any claim/ compensation in the eventuality of Bank deciding to drop any of the work from the scope of work of this tender at any stage during the contract period. Further, we also undertake to execute the work entrusted to us in phases on our approved rates and within stipulated time limit without any extra claim for price escalation as also provided for in the relevant clause "Instructions to Tenderers" of this tender.
- 4) I/ We, hereby, also undertake that, we will not raise any claim for any escalation in the prices of any of the material during the currency of contract/execution/completion period including authorized extended contract period, if any.

5) Our Bankers are:

i)

ii)

The names of partners of our firm are:

i)

ii)

Name of the partner of the firm

Authorised to sign

Or

(Name of person having Power of Attorney to sign the Contract.

(Certified true copy of the Power of Attorney should be attached)

Yours faithfully,

Signature of Contractors.

Signature and addresses of Witnesses

i)

ii)



### **MINIMUM ELIGIBILITY CRITERIA FOR PRE-QUALIFICATION:**

Only those vendors fulfilling the following criteria should respond to the NIT:

- i) The Vendor should have min. 7 years' experience in Audio-Visual system integration and maintenance.
- ii) Vendor should have minimum one project where they have installed ACTIVE LED WALL WITH MINIMUM HEIGHT OF 2.5 Meter AND approx. 15 Sq. Mts an elevational area. It can be separate order other than the orders considered in Sr. No. a to c
- iii) Vendor should have completed minimum [Vendor to submit proper Purchase order & project completion report] during the last 7 years ending on 31/08/2024. Vendor completed project with SBI will also have to provide the documents. Vender has to submit work order along with completion certificate.
  - a) Three 'similar' completed works each costing not less than **Rs. 1.08 Crores** (single work order)  
OR
  - b) Two 'similar' completed works each costing not less than **Rs. 1.35 Crores** (single work order)  
OR
  - c) One 'similar' completed work costing not less than **Rs. 2.16 Crores** (single work order)

#### **NOTE :**

- "Similar" works under this clause shall mean successful completion of supply, installation, testing, commissioning of "Audio Visual (Video) system & its integration with all systems and services for Corporate offices of Listed Companies / Limited companies / PSUs / Nationalized Bank's / Government / Semi – Government offices".
  - "Cost of work" shall mean actual gross value of completed "similar" work including all the components executed under single contract. The bidder shall submit a copy of final Bill certificate of each project executed by them, during the said period.
  - Out of above said completed works, minimum one work of required value should be for some Central / State Government / Central / Autonomous Body / Central / State Public Sector Undertaking / Bank / Financial Institutions etc.
  - "Vendor / Bidder" means proprietary concern, partnership firm, private or public limited company applying for tender.
  - "Employer" or "Client" or "Owner" or "Bank" means State Bank of India.
  - Vendor also should submit the proof of registration of GST with provisional GST registration number. If vendor has not applied for GST then SBI reserves the right to dis-qualify them.
- iv) Vendor should have in-house capacity to install & Programming for AV system including LED wall.
  - v) The bidder should have average minimum annual financial turnover of **Rs. 81 Lakhs** through 'similar' works during the last Three years ending 31.03.2024. This should be duly audited and certified by a Chartered Accountant. Year in which no turnover is shown would also be considered for working out the average.



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

- vi) Vendor must have fully operational Branch office at Mumbai, well equipped to implement an AV project. Vendor need to mention office address, contact information (including e-mail ID of implementation and service team), GST registration. Number for this location (Attach documentary evidence).
- vii) Vendor to submit following documents along with their Technical bid, IT returns, PAN card copy, Certificate of In-corporation, Certificate of Registration.
- viii) Vendor should submit documentary evidence in respect of all above mentioned criteria while submitting the proposal. Proposal of vendor who do not fulfill the above criteria or who fail to submit documentary evidence thereon would be rejected.
- ix) The successful Bidder has to complete the AV Integration by their own employees only. Bidder should not do the outsourcing of technical jobs. The jobs which can be out sources are loading or unloading of the material, delivering the material to site & other non-skilled jobs (Non-skilled jobs do not include the cabling work). Cabling work also has to be carried out by Vendor's employees only.
- x) The bidder should not have incurred any loss during the last three years ending 31.03.2024, duly certified by a Chartered Accountant. The firm should not be under liquidation, court receivership or similar proceedings.
- xi) Bidder's performance for each work completed in the last 7 years and works should be good and it should be certified by an officer not below the rank of Superintending Engineer/Chief Project Manager or equivalent of the client for whom work was executed.
- xii) The bidder should own adequate tools and equipments required for the proper execution of the work on a fast track basis.
- xiii) Only such bidders who fulfill the aforesaid eligibility criteria need apply. Joint ventures and/or consortium are not allowed and are not accepted.





## **INSTRUCTIONS TO THE TENDERERS**

SBI invites “Tender for System Integrators for Supply, Installation, Testing and Commissioning of New active LED wall by replacing the Old video wall, Additional Microphones & allied Services works in existing AV set-up of the Auditorium of State Bank of India at SB Bhavan, Madame Cama Road, Nariman Point, Mumbai”.

### **1.0 Scope of work**

The scope of work is to carry out for the Proposed System Integrators for Supply, Installation, Testing and Commissioning of New active LED wall by replacing the Old video wall, Additional Microphones & allied Services works.

### **1.1 Site and its location**

The proposed work is to be carried out at Auditorium of State Bank of India at State Bank Bhavan, Madame Cama Road, Nariman Point, Mumbai.

### **2.0 Tender documents**

2.1 The work has to be carried out strictly according to the conditions stipulated in the tender consisting of the following documents and the most workmen like manner.

#### **Instructions to tenderers**

#### **General conditions of Contract**

#### **Special conditions of Contract**

#### **Additional specifications**

#### **Drawings**

#### **Priced bid A**

2.2 The above documents shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies, shall take precedence in the order given below;

- a) Price Bid
- b) Technical specifications
- c) Drawings
- d) Special conditions of contract
- f) General conditions of contract
- g) Instructions to Tenderers

2.3 The tender documents are not transferable.



### 3.0 **Site Visit**

- 3.1 The tenderer must obtain himself on his own responsibility and his own expenses all information and data that may be required for the purpose of filling this tender document and enter into a contract for the satisfactory performance of the work. The tenderer is requested satisfy himself regarding the availability of water, power, transport and communication facilities, the character quality and quantity of the materials, labour, the law and order situation, climatic conditions local authorities' requirement, traffic regulations etc.

The tenderer will be fully responsible for considering the financial effect of any or all the factors while submitting his tender.

### 4.0 **Earnest Money**

- 4.1 The tenderers are requested to submit the Earnest Money of **Rs. 2,70,000/- (Rupees Two Lakhs, Seventy Thousand Only)** by means of Demand Draft / Pay Order (Valid for a period of 90 Days from the last date of submission of the tender) from any scheduled Nationalized Bank drawn in favour of State Bank of India, payable at Mumbai.

- 4.2 EMD in any other form other than as specified above will not be accepted. Tender not accompanied by the EMD in accordance with clause 4.1 above shall be rejected.

- 4.3 No interest will be paid on the EMD.

- 4.4 EMD of unsuccessful tenderer will be refunded within 30 days of award of Contract.

- 4.5 EMD of successful tenderer will be retained as a part of security deposit.

### 5.0 **Security Deposit**

- 5.1 Total security deposit shall be 5% of contract value. Out of this 2% of contract value is in the form of Initial Security Deposit (ISD) which includes the EMD. Balance 3% shall be deducted from the running account bill of the work at the rate of 10% of the respective running account bill i.e., deduction from each running bill account will be @10% till Total Security Deposit (TSD) including ISD reaches to 5% of contract value. The 50% of the Total Security Deposit shall be paid to the contract on the basis of Architect's certifying the virtual completion. The balance 50% would be paid to the contractors after the defects liability period as specified in the contract.

- 5.2 No interest shall be paid to the amount retained by the Bank as Security Deposit.

### 6.0 **Signing of contract Documents**

The successful tenderer shall be bound to implement the contract by signing an agreement and conditions of contract attached herewith within 30 days from the receipt of intimation of acceptance of the tender by the Bank. However, the written acceptance of the tenders by the Bank will constitute a binding agreement between the Bank and successful tenderer whether such formal agreement is subsequently entered into or not.



#### 7.0 **Completion Period**

Time is essence of the contract. The work should be completed in all respect accordance with the terms of contract within a period of **4 Months** from the date of award of work.

#### 8.0 **Validity of tender**

Tenders shall remain valid and open for acceptance for a period of **Six Months** from the date of opening price bid. If the tenderer withdraws his/her offer during the value period or makes modifications in his/her original offer which are not acceptable to Bank without prejudice to any other right or remedy the Bank shall be at liberty forfeit the EMD.

#### 9.0 **Liquidated Damages**

The liquidated damages shall be 0.50% per week subject to a maximum of 5% of contract value in case of delay in the completion of the works as per the timelines mentioned in the tender.

#### 10.0 **Rate and prices:**

##### 10.1 **In case of item rate tender**

10.1.1 The tenderers shall quote their rates for individual items both in words and figure. In case of discrepancy between the rate quoted in words and figures, the unit rate quantity in words will prevail. If no rate is quoted for one or more items such tender shall be treated as "Incomplete Tender" and shall be summarily rejected.

The amount of each item shall be calculated and the requisite total is given. In case of discrepancy between the unit rate and the total amount calculated from multiplication of unit rate and the quantity the unit rate quoted will govern and the amount will be corrected.

10.1.2 The tenderers need not quote their rates for which no quantities have been given. In case the tenderers quote their rates for such items those rates will be ignored and will not be considered during execution.

10.1.3 The tenderers should not change the units as specified in the tender. If any unit is changed the tenders would be evaluated as per the original unit and the contractor would be paid accordingly.

The tenderer should not change or modify or delete the description of the item. If any discrepancy is observed he should immediately bring to the knowledge of the Architect/ SBI

10.1.4 Each page of the BOQ shall be signed by the authorized person and cutting or overwriting shall be duly attested by him.

10.1.5 Each page shall be totaled and the grand total shall be given.

10.1.6 The rate quoted shall be firm and shall include all costs, allowances etc. except GST, which shall be payable / reimbursed at actuals.



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

- 10.1.7 The SBI reserve their rights to accept any tenders, either in whole or in part or may entrust the work in phases or may drop the part scope of work at any stage of the project within its sole discretion without assigning any reason(s) for doing so and no claim / correspondence shall be entertained in this regard.
- 10.1.8 In case it is decided by the SBI to drop one or more items from the scope of work at any stage of the project, the contractor shall not be entitled to raise any claim / compensation for such deleted scope of work.



## **GENERAL CONDITIONS OF CONTRACT**

### **1.0 Definitions: -**

“Contract means the documents forming the tender and the acceptance thereof and the formal agreement executed between SBI (client) and the contractor, together with the documents referred there in including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Architects/ Bank and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

1.1 In the contract the following expressions shall, unless the context otherwise requires, have the meaning hereby respectively assigned to them.

1.1.2 ‘Site Engineer’ shall mean an Engineer appointed by the SBI at site as their representative for day-to-day supervision of work and to give instructions to the contractors.

1.1.3 ‘The Contractor’ shall mean the individual or firm or company whether incorporate not, undertaking the works and shall include legal personal representative of individual or the composing the firm or company and the permitted assignees of individual or firms of company.

The expression ‘works’ or ‘work’ shall mean the permanent or temporary work description in the “Scope of work” and / or to be executed in accordance with the contract includes materials, apparatus, equipment, temporary supports, fittings and things of kinds to be provided, the obligations of the contractor hereunder and work to be done by the contractor under the contract.

1.1.4 ‘Engineer’ shall mean the representative of the Architect/consultant.

1.1.5 ‘Drawings’ shall mean the drawings prepared by the Architects and issued by the Engineer and referred to in the specifications and any modifications of such drawings as may be issued by the Engineer from time to time ‘Contract value shall mean value of the entire work as stipulated in the letter of acceptance of tender subject such additions there to or deductions there from as may be made under the provide herein after contained.

1.1.6 ‘Specifications’ shall mean the specifications referred to in the tender and modifications thereof as may time to time be furnished or approved by the Architect/ Consultant.

1.1.7 “Month” means Gregorian calendar month.

1.1.8 “Week” means seven consecutive days.

1.1.9“ Day” means a calendar day beginning and ending at 00Hrs. and 24Hrs. respectively.



## **CLAUSE**

### 1.0 **Total Security Deposit**

Total Security deposit comprise of:  
Earnest Money Deposit  
Initial security deposit  
Retention Money

#### a) **Earnest Money Deposit (EMD):**

The tenderer shall furnish EMD of **Rs. 2,70,000/- (Rupees Two Lakhs, Seventy Thousand Only)** in the form of Demand draft or banker's cheque drawn in favour of State Bank of India Payable at Mumbai. No tender shall be considered unless the EMD is so deposited in the required form. No interest shall be paid on this EMD. The EMD of the unsuccessful tenderer shall be refunded soon after the decision to award the contract is taken without interest. The EMD shall stand absolutely forfeited if the tenderer revokes his tender at any time the period when he is required to keep his tender open acceptance by the SBI or after it is accepted by the SBI the contractor fails to enter into a formal agreement or fails to pay the initial security deposit as stipulated or fails to commence the work within the stipulated time.

#### c) **Retention Money:**

Besides the SD as deposited by the contractor in the above said manner, the Retention money shall be deducted from the running account bill at the rate of 10% of the gross value of work done by the contractor and claimed in each bill provided the total security deposit i.e. ISD plus EMD plus Retention Money shall both together not exceed 5% of the contract value. The 50% of the total security deposit shall be refunded to the contractor without any interest on issue of Virtual Completion certificate by the Architect/consultant. The balance 50% of the total security deposit shall be refunded to the contractors without interest within fifteen days after the end of defects liability period i.e. 3 years provided the contractor has satisfactorily attended to all defects, if any, in accordance with the conditions of contract including site clearance.

### 2.0 **Language**

The language in which the contract documents shall be drawn shall be in English.

### 3.0 **Errors, omissions and discrepancies**

In case of errors, omissions and/ or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications etc, the following order shall apply.

- i) Between scaled and written dimension (or description) on a drawing, the latter shall be adopted.
- ii) Between the written or shown description or dimensions in the drawings and the corresponding one in the specification the former shall be taken as correct.
- iii) Between written description of the item in the specifications and descriptions in bills of quantities of the same item, the former shall be adopted:



- a) In case of difference between rates written in figures and words, the rate in words shall prevail.
- b) Between the duplicate / subsequent copies of the tender, the original tender shall be taken as correct.

#### 4.0 **Scope of Work:**

The contractor shall carryout complete and maintain the said work in every respect strictly accordance with this contract and with the directions of and to the satisfaction Bank to be communicated through the Architect/consultant/ Bank's Engineer. The Architect/consultant at the directions of the SBI from time to time issue further drawings and / or write instructions, details directions and explanations which are here after collectively references to as Architect's /consultant's instructions in regard to the variation or modification of the design, quality or quantity of any work or the addition or omission or substitution work. Any discrepancy in the drawings or between BOQ and / or drawings and / or specifications. The removal from the site of any material brought thereon by the Contractor and any substitution of any other materials therefore the removal and / or re-executed of any work executed by him. The dismissal from the work of any person engaged thereupon.

#### 5.0 i) **Letter of Acceptance:**

Within the validity period of the tender the SBI shall issue a letter of acceptance directly or through the Architect by registered post or otherwise depositing at the of the contractor as given in the tender to enter into a Contract for the execution of the work as per the terms of the tender. The letter of acceptance shall constitute a binding contract between the SBI and the contractor.

#### ii) **Contract Agreement:**

On receipt of intimation of the acceptance of tender from the SBI/ Architect, the successful tenderer shall be bound to implement the contract and within fifteen days there of shall sign an agreement in a non-judicial stamp paper of appropriate value.

#### 6.0 **Ownership of drawings:**

All drawings, specifications and copies thereof furnished by the SBI through its Architect / consultants are the properties of the SBI They are not to be used on other work.

#### 7.0 **Detailed drawings and instructions:**

The SBI through its Architects / consultants shall furnish with reasonable proper additional instructions by means of drawings or otherwise necessary for the execution of the work. All such drawings and instructions shall be consistent with contract documents, true developments thereof and reasonably inferable there.

The work shall be executed in conformity therewith and the contractor prepare a detailed programme schedule indicating therein the date of start and completion of various activities on receipt of the work order and submit the same to the SBI directly/through the Architect/consultant



#### 7.0 **Copies of agreement**

Two copies of agreement duly signed by both the parties with the drawings shall be handed over to the contractors.

#### 8.0 **Liquidated damages:**

If the contractor fails to maintain the required progress in terms of relevant clause of GCC or to complete the work and clear the site including vacating their office on or before the contracted or extended date or completion, without justification in support of the cause of delay, he may be called upon without prejudice to any other right of remedy available under the law to the SBI on account of such breach to pay a liquidated damage at the rate of 0.50% of the contract value which subject to a maximum of 5% of the contract value.

#### 9.0 **Materials, Appliances and Employees**

Unless or otherwise specified the contractor shall provide and pay for all materials, labour, water, power, tools, equipment transportation and any other facilities that are required for the satisfactory execution and completion of the work. Unless or otherwise specified all materials shall be new and both workmanship and materials shall be best quality. The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him. Workman whose work or behavior is found to be unsatisfactory by the SBI /ARCHITECT/ consultant he shall be removed from the site immediately.

#### 10.0 **Permits, Laws and Regulations:**

Permits and licenses required for the execution of the work, shall be obtained by the contractor at his own expenses. The contractor shall give notices and comply with the regulations, laws, and ordinances rules, applicable to the contract. If the contractor observes any discrepancy between the drawings and specifications, he shall promptly notify the SBI in writing under intimation of the Architect/ Consultant. If the contractor performs any act, which is against the law, rules and regulations he shall meet all the costs arising there from and shall indemnify the SBI for any legal actions arising there from.

#### 11.0 **Setting out Work:**

The contractor shall set out the work 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 and get it approved by the Architect / consultant before proceeding with the work. If at any time any error in this respect shall appear during the progress of the works, irrespective of the fact that the layout had been approved by, the Architect / consultant the contractor shall be responsible for the same and shall his own expenses rectify such error, if so, required to satisfaction of the SBI.





## 12.0 Protection of works and property:

The contractor shall continuously maintain adequate protection. of all his work from damage and shall protect the SBI's properties from injury or loss arising in connection with contract. He shall make good any such damage, injury, loss, except due to causes beyond his control and due to his fault or negligence.

He shall take adequate care and steps for protection of the adjacent properties. The contractor shall take all precautions for safety and protections of his employees on the works and shall comply with all applicable provisions of Govt. and local bodies' safety laws and building codes to prevent accidents, or injuries to persons or property on about or adjacent to his place of work. The contractor shall take insurance covers as per relevant clause at his own cost. The policy may be taken in joint names of the contractor and the SBI and the original policy may be lodged with the SBI

## 13.0 Inspection of work:

The SBI / Architect / Consultant or their representatives shall at all reasonable times have free access to the work site and / or to the workshop, factories, or other places where materials are lying or from where they are obtained and the contractor shall give every facility to the SBI/Architect/consultant and their representatives necessary for inspection and examination and test of the materials and workmanship. No person unless authorized by the SBI/ Architect /Consultant except the representative of Public authorities shall be allowed on the work at any time. The proposed work either during its construction stage or its completion can also be inspected by the Chief Technical Examiner's Organization a wing of Central Vigilance commission.

## 14.0 Assignment and subletting

The whole of work included in the contract shall be executed the contractor and he shall not directly entrust and engage or indirectly transfer, assign or underlet the contract or any part or share there of or interest therein without the written consent of the SBI through the Architect and no undertaking shall relieve the contractor from the responsibility of the contractor from active & superintendence of the work during its progress.

## 15.0 Quality of materials, workmanship & Test

All materials and workmanship shall be best of the respective kinds described in the contract and in accordance with Architect/consultant instructions and shall be subject from time to time to such tests as the Architect/consultant may direct at the place of manufacture or fabrication or on the site or an approved testing laboratory. The contractor shall provide such assistance, instruments, machinery, labor, and materials as are normally required for examining measuring sampling and testing any material or part of work before incorporation in the work for testing as may be selected and required by the Architect/consultant.

### ii) Samples / Models

All samples of adequate numbers, size, shades & pattern as per specifications shall be supplied by the contractor without any extra charges. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site detailed literature / test certificate of the same shall be provided to the satisfaction of the Bank/Architect/consultant. Before submitting the sample / literature the contractor



shall satisfy himself that the material / equipment for which he is submitting the sample / literature meet with the requirement of tender specification. Only when the samples are approved in writing by the Bank/Architect / consultant the contractor shall proceed with the procurement and installation of the particular material / equipment. The approved samples shall be the signed by the Bank/Architect / Consultant for identification and shall be kept on record at site office until the completion of the work for inspection / comparison at any time. The Bank/Architect/Consultant shall take reasonable time to approve the sample. Any delay that might occur in approving the samples for reasons of its not meeting the specifications or other discrepancies inadequacy in furnishing samples of best qualities from various manufacturers and such other aspects causing delay on the approval of the materials / equipment etc. shall be to the account of the contractor.

iii) **Cost of tests**

The cost of making any test shall be borne by the contractor if such test is intended by or provided for in the specification or BOQ.

iv) **Cost of tests not provided for**

If any test is ordered by the Bank/Architect/ Consultant which is either

- a) If so intended by or provided for or (in the cases above mentioned) is not so particularized, or though so intended or provided for but ordered by the Architect / Consultant to be carried out by an independent person at any place other than the site or the place of manufacture or fabrication of the materials tested or any Government / approved laboratory, then the cost of such test shall be borne by the contractor.

16.0 **Obtaining information related to execution of work**

No claim by the contractor for additional payment shall be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the work nor any misunderstanding or the obtaining incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of contract.

17.0 **Contractor's superintendence**

The contractor shall give necessary personal superintendence during the execution the works and as long, thereafter, as the Bank/Architect / Consultant may consider necessary until the expiry of the defects liability period, stated here to.

18.0 **Quantities**

- i) The bill of quantities (BOQ) unless or otherwise stated shall be deemed to have been prepared in accordance with the Indian Standard Method of Measurements and quantities. The rate quoted shall remain valid for variation of quantity against individual item to any extent. The entire amount paid under Clause 19, 20 hereof as well as amounts of prime cost and provision sums, if any, shall be excluded.

19.0 **Works to be measured**

The Bank/Architect/Consultant may from time to time intimate to the contractor that he requires the work to be measured and the contractor shall forthwith attend or send a



representative to assist the Bank/Architect in taking such measurements and calculation and to furnish all particulars or to give all assistance required by any of them. Such measurements shall be taken in accordance with the Mode of measurements detail in the specifications. The representative of the Bank/Architect / Consultant shall take measurements with the contractor's representative and the measurements shall be entered in the measurement book. The contractor or his authorized representative shall sign all the pages of the measurement book in which the measurements have been recorded in token of his acceptance. All the corrections shall be duly attested by both representatives. No over writings shall be made in the Measurement Book (M.B.) Should the contractor not attend or neglect or omit to depute his representative to take measurements, the measurements recorded by the representative of the Bank/Architect / consultant shall be final. All authorized extra work, omissions and all variations made shall be included such measurement.

## 20.0 Variations

No alteration, omission or variation ordered in writing by the Bank/Architect / consultant vitiates the contract. In case the SBI / Architect / Consultant thinks proper at any during the progress of works to make any alteration in, or additions to or omission from the works or any. alteration in the kind or quality of the materials to be used therein, the Bank/Architect / Consultant shall give notice thereof in writing to the contractor shall confirm in writing within seven days of giving such oral instructions the contract shall alter to, add to, or omit from as the case may be in accordance with such 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 previous consent in writing of the Bank/Architect/ Consultant and the value of such extras, alterations, additions or omissions shall in all cases be determined by the Architect / Consultant and the same shall be added to or deducted from the contract value, as the case may be.

## 21.0 Valuation of Variations

No claim for an extra shall be allowed unless it shall have been executed under the authority of the Bank/Architect / Consultant with the concurrence of the SBI as herein mentioned. Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions.

- a) (i) The net rates or prices in the contract shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced herein.  
  
(ii) Rates for all items, wherever possible should be derived out of the rates given in the priced BOQ.
- b) The net prices of the original tender shall determine the value of the items omitted, provided if omissions do not vary the conditions under which any remaining items of Works are carried out, otherwise the prices for the same shall be valued under sub-Clause 'c' hereunder.
- c) Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items or works are carried out, then the contractor shall within 7 days of the receipt of the letter of acceptance inform the Architect/ consultant of the rate which he



intends to charge for such items of work, duly supported by analysis of the rate or rates claimed and the Architect/ consultant shall fix such rate or prices as in the circumstances in his opinion are reasonable and proper, based on the market rate.

- d) Where extra work cannot be properly measured or valued the contractor shall be allowed day work prices at the net rates stated in the tender, of the BOQ 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 (and if required by the Architect/Consultant) the workman's name and materials employed be delivered for verifications to the Architect /consultant at or before the end of the week following that in which the work has been executed.
- e) It is further clarified that for all such authorized extra items where rates cannot be derived from the tender, the Contractor shall submit rates duly supported by rate analysis worked on the 'market rate basis for material, labour hire / running charges of equipment and wastages etc. plus 15% towards establishment charges, contractor's overheads and profit. Such items shall, not be eligible for escalation.

## 22.0 Final measurement

The measurement and valuation in respect of the contract shall be completed within two months of the virtual completion of the work.

## 23.0 Virtual Completion Certificate (VCC)

On successful completion of entire works covered by the contract to the full satisfaction of the SBI, the contractor shall ensure that the following works have been completed the satisfaction of the SBI:

- a) Clear the site of all scaffolding, wiring, pipes, surplus materials, contractor's labour equipment and machinery.
- b) Demolish, dismantle and remove the contractor's site office, temporary works, structure including labour sheds/camps and constructions and other items and things whatsoever brought upon or erected at the site or any land allotted to the contractor by the SBI not incorporated in the permanent works.
- c) Remove all rubbish, debris etc. from the site and the land allotted to the contractor the SBI and shall clear, level and dress, compact the site as required by the SBI.
- d) Shall put the SBI in undisputed custody and possession of the site and all land allot by the SBI.
- e) Shall hand over the work in a peaceful manner to the SBI
- f) All defects / imperfections have been attended and rectified as pointed out by the Architects to the full satisfaction of SBI.

Upon the satisfactory fulfillment by the contractor as stated above, the contractor is entitled to apply to the Architect / consultant is satisfied of the completion of work. Relative to which the completion certificate has been sought, the Architect/ consultant shall within fourteen (14) days of the receipt of the application for completion certificate, issue a VCC in respect of the work for which the VCC has applied.



This issuance of a VCC shall not be without prejudice to the SBI's rights and contractor liabilities under the contract including the contractor's liability for defects liability nor shall the issuance of VCC in respect of the works or work at any site be construction as a waiver of any right or claim of the SBI against the contractor in respect of or work at the site and in respect of which the VCC has been issued.

#### 24.0 **Work by other agencies**

The SBI / Architect / consultant reserves the rights to use premises and any portion the site for execution of any work not included in the scope of this contract which it may desire to have carried out by other persons simultaneously and the contractor shall not only allow but also extend reasonable facilities for the execution of such work. The contractor however shall not be required to provide any plant or material for the execution of such work except by special arrangement with the SBI. Such work shall be carried out in such manner as not to impede the progress of the works included in the contract.

#### 25.0 **Insurance of works**

25.1 Without limiting his obligations and responsibilities under the contract the contractor shall insure in the joint names of the SBI and the contractor against all loss of damages from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the SBI and contractor are covered for the period stipulated vide clause of GCC and are also covered during the period of maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under clause.

- a) The Works for the time being executed to the estimated current Contract value thereof, or such additional sum as may be specified together with the materials for incorporation in the works at their replacement value.
- b) The constructional plant and other things brought on to the site by the contractor to the replacement value of such constructional plant and other things.
- c) Such insurance shall be affected with an insurer and in terms approved by the SBI which approval shall not be unreasonably withheld and the contractor shall whenever require produce to the Architect / consultant the policy if insurance and the receipts for payment of the current premiums.

#### 25.2 **Damage to persons and property**

The contractor shall, except if and so far as the contract provides otherwise indemnify the SBI against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation of damages for or with respect to:

- a) The permanent use or occupation of land by or any part thereof.
- b) The right of SBI to execute the works or any part thereof on, over, under, in or through any lands.



- c) Injuries or damages to persons or properties which are unavoidable result of the execution or maintenance of the works in accordance with the contract
- d) Injuries or damage to persons or property resulting from any act or neglect of the SBI their agents, employees or other contractors not being employed by the contractor or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the SBI, their employees, or agents or other employees, or agents or other contractors for the damage or injury.

#### 25.3 Contractor to indemnify SBI

The contractor shall indemnify the SBI against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision sub-clause 25.2 of this clause.

#### 25.4 Contractor's superintendence

The contractor shall fully indemnify and keep indemnified the SBI against any action, claim, or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claim made under or action brought against SBI in respect of such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expenses to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the SBI if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Architect / consultant in this behalf.

#### 25.5 Third Party Insurance

- 25.5.1 Before commencing the execution of the work the contractor but without limiting his obligations and responsibilities under clause 24.0 of GCC shall insure against his liability for any material or physical damage, loss, or injury which may occur to any property including that of SBI, or to any person, including any employee of the SBI, by or arising out of the execution of the works or in the carrying out of the contract, otherwise than due to the matters referred to in the provision to clause 24.0 thereof.

#### 25.5.2 Minimum amount of Third-Party Insurance

Such insurance shall be affected with an insurer and in terms approved by the SBI which approval shall not be reasonably withheld and for at least the amount stated below. The contractor shall, whenever required, produce to the Architect / consultant the policy or policies of insurance cover and receipts for payment of the current premiums.

- 25.6 The minimum insurance cover for physical property, injury, and death is ₹5 Lakh per occurrence with the number of occurrences limited to four. After each occurrence contractor will pay additional premium necessary to make insurance valid for four occurrences always.



## 25.7 Accident or Injury to workman:

25.7.1 The SBI shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the contractor or any sub-contractor, save and except an accident or injury resulting from any act or default of the SBI or their agents, or employees. The contractor shall indemnify and keep indemnified SBI against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

### 25.7.2 Insurance against accidents etc. to workmen

The contractor shall insure against such liability with an insurer approved by the SBI during the whole of the time that any persons are employed by him on the works and shall, when required, produce to the Architect / consultant such policy of insurance and receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor the contractor's obligation to insured as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that SBI is indemnified under the policy but the contractor shall require such sub-contractor to produce to the Architect /consultant when such policy of insurance and the receipt for the payment of the current premium.

### 25.7.3 Remedy on contractor's failure to insure

If the contractor fails to effect and keep in force the insurance referred to above or any other insurance which he may be required to effect under the terms of contract, then and in any such case the SBI may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the SBI as aforesaid from any amount due or which may become due to the contractor, or recover the same as debt from the contractor.

25.7.4 Without prejudice to the others rights of the SBI against contractors. In respect of such default, the employer shall be entitled to deduct from any sums payable to the contractor the amount of any damages costs, charges, and other expenses paid by the SBI and which are payable by the contractors under this clause. The contractor shall upon settlement by the Insurer of any claim made against the insurer pursuant to a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the monies received from the Insurer in respect of such damage shall be paid to the contractor and the Contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing of the materials or goods destroyed or damaged.

## 26.0 Commencement of Works:

The date of commencement of the work will be reckoned as the date, seven days from the date of award of letter by the SBI.

## 27.0 Time for completion

Time is essence of the contract and shall be strictly observed by the contractor. The entire work shall be completed within a period of **4 Months** from the date of purchase order/work order. If required in the contract or as directed by the Bank/Architect / consultant. The contractor shall complete certain portions of work before completion of



the entire work. However, the completion date shall be reckoned as the date by which the whole work is completed as per the terms of the contract.

#### **28.0 Extension of time**

If, in the opinion of the Bank/Architect/consultant, the work be delayed for reasons beyond the control of the contractor, the Architect/consultant may submit a recommendation to the SBI to grant a fair and reasonable extension of time for completion of work as per the terms of contract. If the contractor needs an extension of time for the completion of work or if the completion of work is likely to be delayed for any reasons beyond the due date of completion as stipulated in the contract, the contractor shall apply to the SBI directly/ through the Architect' Consultant in writing at least 30 Days before the expiry of the scheduled time and while applying for extension of time he shall furnish the reason in detail and his justification if any, for the delays. The Architect/consultant shall submit their recommendations to the SBI in the prescribed format for granting extension of time. While granting extension of time the contractor shall be informed the period extended time which will qualify for levy of liquidated damages. For the balance period in excess of original stipulated period and duly sanctioned extension of time by the provision of liquidated damages as stated relevant clause shall become applicable. Further the contract shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

#### **29.0 Rate of progress**

Whole of the materials, plant and labour to be provided by the contractor and the mode, manner and speed of execution and maintenance of the works are to be of a kind and conducted in a manner to the satisfaction of the Bank/Architect / consultant should the rate of progress of the work or any part thereof be at any time be in the opinion the Bank/ Architect / consultant too Slow to ensure the completion of the whole of the work the prescribed time or extended time for completion the Bank/ Architect / consultant shall thereupon take such steps as considered necessary by the Bank/Architect / consultant to expedite progress so as to complete the works by the prescribed time or extended time. Such communications from the Bank/Architect / consultant neither shall relieve the contractor from fulfilling obligations under the contract nor he will be entitled to raise any claims arising out of such directions.

#### **30.0 Work during nights and holidays**

Subject to any provision to the contrary contained in the contract no permanent work shall save as herein provided be carried on during the night or on holidays without the permission in writing of the Bank/Architect / consultant, save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the work in which case the contractor shall immediately advise the Bank/ Architect / consultant. However, the provisions of the clause shall not be applicable in the case of any work which becomes essential to carry by rotary or double shifts in order to achieve the progress and quality of the part of the works being technically required / continued with the prior approval of the Architect / consultant at no extra cost to the SBI

All work at night after obtaining approval from competent authorities shall be carried out without unreasonable noise and disturbance.

#### **31.0 No compensation or restrictions of work**





If at any time after acceptance of the tender SBI shall decide to abandon or reduce the scope of work for any reason whatsoever and hence not required the whole or any part of the work to be carried out. The Architect / consultant shall give notice in writing that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever on account of any profit or advantage which he might have derived from the execution of the Work fully but which he did not derive in consequence of the foreclosure of the whole or part of the work.

Provided that the contractor shall be paid the charges on the cartage only of materials actually and bona-fide brought to the site of the work by the contractor and rendered surplus as a result of the abandonment, curtailment of the work or any portion thereof and then taken back by the contractor, provided however that the Architect / Consultant shall have in such cases the option of taking over all or any such materials at their purchase price or a local current rate whichever is less.

“In case of such stores having been issued from SBI stores and returned by the contractor to stores, credit shall be given to him at the rates not exceeding those at which were originally issued to the contractor after taking into consideration and deduction for claims on account of any deterioration or damage while in the custody of the contractor and in this respect the decision of Architect / consultant shall be final.

### **32.0 Suspension of work**

- i) The contractor shall, on receipt of the order in writing of the Bank/Architect / consultant (whose decision shall be final and binding on the contractor) suspend the progress of works or any part thereof for such time and in such manner as Bank/Architect /consultant may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of following reasons:
  - a) On account any default on the part of the contractor, or
  - b) For proper execution of the works or part thereof for reasons other than the default the contractor, or
  - c) For safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works the extent necessary and carry out the instructions given in that behalf by the Bank/Architect / consultant.

- i) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:  
The contractor shall be entitled to an extension of time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.

### **33 Action when the whole security deposit is forfeited**

In any case in which under any clause or clauses of this contract, the Contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit the Architect / consultant shall have the power to adopt any of the following course as they may deem best suited to the interest of the SBI:



- a) To rescind the contract (of which rescission notice in writing to the contractor by - Architect / consultant shall be conclusive evidence) and in which case the security, deposit of the contractor shall be forfeited and be absolutely at the disposal of SBI
- b) To employ labour paid by the SBI and to supply materials to carry out the work, or part of the work, debiting the contractor with the cost of the labour and materials cost of such labour and materials as worked out by the Architect/consultant shall final and conclusive against the contractor) and crediting him with the value of the work done, in all respects in the same manner and at the same manner and at the same rates as if it had been carried out by the contractor under the terms of this contract certificate of Architect /consultant as to the value of work done shall be final conclusive against the contractor.
- c) To measure up the work of the contractor, and to take such part thereof as shall unexecuted, out of his hands, and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him ( The amount of which excess the certificates in writing of the Architects / consultant shall final and conclusive) shall be borne by original contractor and may be deducted f any money due to him by SBI under the contract or otherwise, or from his security deposit or the proceeds of sale thereof, or sufficient part thereof.

In the event of any of above courses being adopted by the SBI the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any material or entered into any engagements or make any advances on account of, or with a view to the execution of the work or the performance of the contract and in case the contract shall be rescind under the provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum or any work thereto for actually performed under this contract, unless, and until the Architect / consultant will have certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified.

#### 34.0 **Owner's right to terminate the contract**

If the contractor being an individual or a firm commit any 'Act of insolvency' or shall be adjusted an insolvent or being an incorporated company shall have an order for compulsory winding up voluntarily or subject to the supervision of Govt. and of the Official Assignee of the liquidator in such acts of insolvency or winding up shall be unable within seven days after notice to him to do so, to show to the reasonable satisfaction of the Architect / Consultant that he is able to carry out and fulfill the contract, and to dye security therefore if so required by the Architect / Consultant or if the contractor (whether an individual firm or incorporated Company) shall suffer execution to be issued or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the contractor.

Or shall assign or sublet this contract without the consent in writing of the SBI through the Architect/Consultant or shall charge or encumber this contract or any payment due to which may become due to the contractor there under:

- a) has abandoned the contract; or
- b) has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 14 days after receiving from the SBI through the Architect / consultant written notice to proceed, or



- c) has failed to proceed with the works with such diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or has failed to remove the materials from the site or to pull down and replace work within seven days after written notice from the SBI through the Architect / Consultant that the said materials were condemned and rejected by the Architect/consultant under these conditions; or has neglected or failed persistently to observe and perform all or any of the acts matters or things by this contract to be observed and performed by the contractor for seven days after written notice shall have been given to the contractor to observe or perform the same or has to the detriment of good workmanship or in defiance of the SBI or Architect's / consultant's instructions to the contrary subject any part of the contract. Then and in any of said cases the SBI and or the Architect / consultant, may not withstanding any previous waiver, after giving seven days' notice in writing to the contractor, determine the contract, but without thereby affecting the powers of the SBI or the Architect / consultant or the obligation and liabilities of the contractor the whole of which shall continue in force as fully as if the contract had not been determined and as if the works subsequently had been executed by or on behalf of the contractor. And, further the SBI through the Architect / consultant their agents or employees may enter upon and take possession of the work and all plants, took scaffoldings, materials, sheds, machineries lying upon the premises or on the adjoining lands or roads use the same by means of their own employees or workmen in carrying on and completing the work or by engaging any other contractors or persons to the work 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 persons employed for complement and finishing or using the materials and plant for the works.

When the works shall be completed or as soon thereafter as convenient the SBI or Architect / consultant shall give a notice in writing to the contractor to remove his surplus materials and plants and should the contractor fail to do so within 14 days after receive thereof by him the SBI sell the same by publication, and after due publication, and shall, adjust the amount realized by such auction. The contractor shall have no right to question any of the act of the SBI incidental to the sale of the materials etc.

### 35.0 **Certificate of payment**

The contractor shall be entitled under the certificates to be issued by the Architect / consultant to the contractor within 10 working days from the date of certificate to payment from SBI from time to time. The SBI shall recover the statutory recovering other dues including the retention amount from the certificate of payment.

Provided always that the issue of any certificate by the Architect / consultant during progress of works or completion shall not have effect as certificate of satisfaction relieve the contractor from his liability under clause.

The Architect / consultant shall have power to withhold the certificate if the work or in part thereof is not carried out to their satisfaction.

The Architect / consultant may by any certificate make any corrections required previous certificate.

The SBI shall modify the certificate of payment as issued by the Architect / consultant from time to time while making the payment



The contractor shall submit interim bills only after taking actual measurements and properly recorded in the Measurement Book (M.B.)

The Contractor shall not submit interim bills when the approximate value of work done by him is less than **Rs. 30.00 Lakhs.**

The final bill may be submitted by contractor within a period of one month from the date of virtual completion and Architect / consultant shall issue the certificate of payment within a period of two months. The SBI shall pay the amount within a period of three months from the date of issue of certificate provided there is no dispute in respect of rates and quantities.

The contractor shall submit the interim bills in the prescribed format with all details.

### 36.0 A. Settlement of Disputes and Arbitration

Except where otherwise provided in the contract all questions and disputes to the meaning of the specifications, design, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings specifications, estimates, instructions orders or these conditions or otherwise concerning the work or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

- i) If the contractor considers that he is entitled to any extra payment or compensation in respect of the works over and above the amounts admitted as payable by the Architect or in case the contractor wants to dispute the validity of any deductions or recoveries made or proposed to be made from the contract or raise any dispute, the contractor shall forthwith give notice in writing of his claim, or dispute to The Deputy General Manager (Estate), SBI Corporate Centre, 9<sup>th</sup> floor, State Bank Bhavan, Madam Cama road, Mumbai-21 And endorse a copy of the same to the Architect, within 30 days from the date of disallowance thereof or the date of deduction or recovery. The said notice shall give full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the contractor shall not be entitled to raise any claim nor shall the SBI be in any way liable in respect of any claim by the contractor unless notice of such claim shall have been given by the contractor to The Deputy General Manager (Estate), SBI Corporate Centre in the manner and within the time as aforesaid. The Contractor shall be deemed to have waived and extinguished all his rights in respect of any claim not notified to The Deputy General Manager (Estate), SBI Corporate Centre in writing in the manner and within the time aforesaid.

### B. Settlement of Disputes and Arbitration

The Deputy General Manager (Estate), SBI Corporate Centre shall give his decision in writing on the claims notified by the contractor. The contractor may within 30 days of the receipt of the decision of The Deputy General Manager (Estate), SBI Corporate Centre submit his claims to the conciliating authority namely the General Manager (OL & CS), SBI Corporate Centre for conciliation along with all details and copies of correspondence exchanged between him and the Deputy General manager (Estate), SBI corporate centre.

- i) If the conciliation proceedings are terminated without settlement of the disputes, the contractor shall, within a period of 30 days of termination thereof shall give a notice to



the Deputy Managing Director & CDO for appointment of an arbitrator to adjudicate the notified claims falling which the claims of the contractor shall be deemed to have been considered absolutely barred and waived.

- ii) Except where the decision has become final, binding and conclusive in terms of the contract, all disputes or differences arising out of the notified claims of the contractor as aforesaid and all claims of the Bank shall be referred for adjudication through arbitration by the Sole Arbitrator appointed by the Deputy Managing Director & CDO. It will also be no objection to any such appointment that the Arbitrator so appointed is a Bank Officer and that he had to deal with the matters to which the Contract relates in the course of his duties as Bank Officer. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid by the said Deputy Managing Director & CDO of the SBI. Such person shall be entitled to proceed with the reference from the stage at which it was let by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator.

It is also a term of this contract that no person other than a person appointed by such Deputy Managing Director & CDO as aforesaid should act as arbitrator.

The conciliation and arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act 1996 or any or any accordance modification or reenactment thereof and the rules made there under.

It is also a term of the contract that if any fees are payable to the Arbitrator these shall be paid equally by both the parties. However, no fees will be payable to the arbitrator if he is a Bank Officer.

It is also a term of the contract that the Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any of the arbitrators shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The Cost of the reference and of the award (including the fees, if any of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof, shall be paid and fix or settle the amount of costs to be so paid.

### 37.0 **Water Supply**

The contractor shall make his own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following condition.

- i) That the water used by the contractor shall be fit for construction purposes to the satisfaction of the Architect / consultant's.
- ii) The contractor shall make alternative arrangements for the supply of water if the arrangement made by the contractor for procurement of water in the opinion of the Architect / consultant is unsatisfactory.

- 37.1 The contractor shall construct temporary well / tube well in SBI and for taking water for construction purposes only after obtaining permission in writing from the SBI. The



- contractor has to make his own arrangements for drawing and distributing the water at his own cost. He has to make necessary arrangements. To avoid any accidents or damages caused due to construction and subsequent maintenance of the wells. He has to obtain necessary approvals from local authorities, if required, at his own cost. He shall restore the ground to its original condition after wells are dismantled on completion of work or hand over the well to the SBI without any compensation as directed by the Architect / consultant.
- 37.2 If the contractor makes use of Bank's water connection or power connection ( after obtaining due permission, an amount of 0.25% of the tendered amount/amount of final bill , whichever is higher will be deducted.
- 38.0 **Power Supply**  
The contractor shall make his own arrangements for power and supply / distribution system for driving plant or machinery for the work and for lighting purpose.
- 39.0 **Treasure Trove etc.**  
Any treasure trove, coin or object antique which may be found on the site shall be the property of SBI and shall be handed over to the bank immediately.
- 40.0 **Method of Measurement**  
Unless otherwise mentioned in the schedule of quantities or in mode of measurement, the measurement will be on the net quantities or work produced in accordance with up to date rules laid down by the Bureau of Indian Standards. In the event any dispute / disagreement the decision of the Bank/Architect / consultant shall be final and binding on the contractor.
- 41.0 **Maintenance of Registers**  
The contractor shall maintain the following registers as per the enclosed perform at site of work and should produce the same for inspection of SBI/Architect / consultant whenever desired by them. The contractor shall also maintain the records / registers as required by the local authorities / Govt. from time to time.
- i) Register for secured advance
  - ii) Register for hindrance to work
  - iii) Register for running account bill
  - iv) Register for labour
- 42.0 **Force Majeure**
- 42.1 Neither contractor nor SBI shall be considered in default in performance of the obligations if such performance is prevented or delayed by events such as but not war, hostilities revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storms, floods, droughts, earthquakes or ordinances or any act of or for any other cause beyond the reasonable control of the party affected or prevents or delayed. However, a notice is required to be given within 30 days from the happening of the event with complete details, to the other party to the contract, if it is not possible to serve a notice, within the shortest possible period without delay.
- 42.2 As soon as the cause of force majeure has been removed the party whose ability perform its obligations has been affected, shall notify the other of such cessation and the actual delay incurred in such affected activity adducing necessary evidence in support thereof.
- 42.3 From the date of occurrence of a case of force majeure obligations of the party affected shall be suspended during the continuance of any inability so caused. With



the caused itself and inability resulting there from having been removed, the agreed time completion of the respective obligations under this agreement shall stand extended a period equal to the period of delay occasioned by such events.

42.4 Should one or both parties be prevented from fulfilling the contractual obligations by state of force majeure lasting to a period of 6 months or wore the two parties, shall each other to decide regarding the future execution of this agreement.

**43.0 Local laws, Acts Regulations:**

The contractor shall strictly adhere to all prevailing labour laws inclusive at contract labour (regulation and abolition act of 1970) and other safety regulations. The contractors should comply with the provision of all labour legislation including the latest requirements of the Acts, laws, any other regulations that are applicable to the execution of the project.

- i) Minimum wages Act 1948 (Amended)
- ii) Payment of wages Act 1936 (Amended)
- iii) Workmen's compensation Act 1923 (Amended)
- iv) Contract labour regulation and abolition act 1970 and central rules 1971 (Amended)
- v) Apprentice act 1961 (amended)
- vi) Industrial employment (standing order) Act 1946 (Amended)
- vii) Personal injuries (Compensation insurance) act 1 963 and any other modifications
- viii) Employees' provident fund and miscellaneous provisions Act 1952 and amendment thereof
- ix) Shop and establishment act
- x) Any other act or enactment relating thereto and rules framed there under from time to time.
- xi) Prevailing Indian Electricity rules & act.

**44.0 Accidents**

The contractor shall immediately on occurrence of any accident at or about the site or in connection with the execution of the work report such accident to the Architect / consultant. The contractor shall also such report immediately to the competent authority whenever such report is required to be lodged by the law and take appropriate actions thereof.

**45. Specific Terms & Conditions:**

The consignment shall be door delivered at the site address, i.e. Auditorium block of State Bank of India, Corporate Centre, S.B. Bhavan, Nariman Point, Mumbai.

The rates shall remain valid for **Six Months** from the date of opening of tender and the offers are likely to be extended as per the requirements of the Bank.

The orders will be issued to only to the lowest tenderer. If the lowest tenderer is not able to carry out the Supply, Installation, Testing and Commissioning of New active LED wall by replacing the Old video wall, Additional Microphones & allied Civil, Interior & Services works then further tenders will not be issued to them & the agency would be debarred from further tendering process of the bank.

**PAYMENT TERMS:** - SBI will make payment for the contracted items / services under this RFP only for the items of Video wall & Microphones as per details given below:



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

30% of the ordered Material supply value {To be supported with documentary evidence} (Materials i.e. Video Wall as per the Price Bid) after the supply of the complete Video Wall system at site

50% of the ordered Material supply value {To be supported with documentary evidence} (Materials i.e. Video Wall as per the Price Bid) after the Installation, Testing & Commissioning of the complete Video Wall system at site i.e. handing over of entire system to the Bank all as per the technical specification and terms and conditions specified in the contract.

The payment of balance amount including the payment against the completion of the remaining works such as Microphones along with their accessories and allied materials pertaining to the scope as per the Price Bid including synchronization of all works along with the Civil, Interiors & Services works shall be made as per the R.A Bills certified by the Architect / Consultant &/or Engineer in charge and after deduction of necessary retention amount, security deposit &/or performance security amount from the said R.A Bills raised by the vendor and shall be released on pro-rata basis against the actual works executed on site and only against the satisfactory completion of the said works & milestones associated with the project and subject to the minimum value of the interim bill certificate duly achieved in terms of progress of works on site.

SBI will make this payment against testing reports and acceptance reports and against submission of a Performance Guarantee (Format of which will be given by the SBI) for the warranty period.

Entire Installation & Services payments will be given against final Handover. The relevant clauses for Security deposit, Retention amount including the release of the said amounts would be referred.

The AMC charges shall be paid by SBI on quarterly basis at the end of each quarter after satisfactory services.

**Penalty:** A penalty @ 0.5% per week subject to a maximum of 5% of the work order value shall be levied for delay in supply and completion of the work attributable to supplier. The penalty clause for delay in Video wall & Microphones delivery shall be applicable after two weeks from the date of order.

The Agency shall send their authorized representative for site meetings arranged by the Bank even at a short notice.

Service calls should be attended within 2 hours. Also details shall be entered in the Bank's log book at the Branch by the service personal then and there.

If the rectification is not done within a considerable time the same shall be reported to our office concerned branch and Administrative Office with due reasons immediately.

Quantities contained in the schedule are only indicative and approximate. The work as actually done will be measured up and paid as per terms and conditions of the contract.

Each page of the tender documents should be signed by an authorized person in token of having acquainted with the General Conditions of contract, specifications, as laid down.

Vendors have to submit list of own service center in Mumbai with clear postal address, contact person, phone / fax nos. etc., along with the offer.

All disputes are subject to Mumbai jurisdictions only.





**Guarantee / defect liability period:** The supplied, installed, tested and commissioned system should be guaranteed for one year from the date of commissioning. Any faulty parts of the systems shall be replaced with new one at vendor's cost. After the completion of the one year's period, the AMC contract as per the tender would be applicable.

#### **46. Additional important terms & conditions of the tender**

- i) This document constitutes a formal Notice Inviting Tender (NIT) for vendors who required to carry out the following:
- ii) Vendor need to quote for Packaging, Cabling, Installation and Commissioning and Programming. Vendor to carry out works like Conduit, Raceway, Civil, Electrical, whichever required completing the project site.
- iii) To provide, as a part of the project, proper guidance about the infrastructure (like air-conditioning, acoustics, lighting arrangement, power supply, network points, etc.,) required to prepare the sites. Also, provide design for layout of the equipment at the location and install and commission the equipments accordingly.
- iv) To provide necessary training to the staff of SBI on Audio-Video equipments and Video Conferencing which will cover installation, implementation, administration, usage, troubleshooting and interpretation of reports, logs etc.
- v) To maintain and run the AV System with Video Conference units under Comprehensive Annual Maintenance Contract (CAMC).
- vi) Vendors are expected to offer solutions covering all the functionality as mentioned in this NIT document. Incomplete responses will not be considered and no correspondence in this regard will be entertained. Any shortcomings in the standard the products or designs available with the OEM's / vendors should be clarified on or before the pre-bid meeting in writing and no claim whatsoever will be entertained at any stage later-on during the course of execution of works on site.

#### **47.0 *Designing and implementation Plan:***

- i. Vendor is required to develop a detailed implementation plan of the project which should include the full scope of the project as mentioned above. On acceptance of such plan by the SBI, the vendor is required to carry out the implementation including supply, installation, Programming, testing, commissioning, & Training of equipment, etc.
- ii. Vendor to enclose the implementation plan of all Services mentioned in NIT, in Technical Bid. SBI reserves to reject vendor's on basis of their Time schedule & Implementation plan. The Price bid of such vendors will not be opened.

#### **48.0 *Contract with the Vendor***

- i. SBI would enter into a contract with the finally selected vendor who will be responsible for delivery, installation, commissioning and overall implementation of a Audio-Video solution.
- ii. Bidder should submit the proposals with min. 3 years warranty. Bidder should take the prior back to back warranty from all OEMs. IF SBI finds it necessary to check it, SBI reserves all rights to check it with OEM or may ask certificate from OEM with serial Numbers.
- iii. The finalization will be done on the basis of BID VALUE after all the tender conditions



are fulfilled. **BID VALUE** = Material cost with 3 Years warranty + Implementation cost. + Onsite support for 36 Months from the date of start of the warranty period with Manpower for 10 hrs/day x 7 days a week)

#### **49.0 Warranty**

The offer must include comprehensive on-site warranty for 3 year from the date of acceptance of the system by SBI (Handover date) after its installation and commissioning. Handover will be done only after confirmation that there no defects /faults/ work issues/snags etc and no representation by the vendor would be entertained. Onsite comprehensive warranty shall include all the hardware components including free replacement of spares, parts, kits as and when necessary or directed by the Architects, Consultants &/or Bank.

#### **50.0 Comprehensive Annual Maintenance Contract (CAMC) & FMS Services**

Vendors are expected to quote for Comprehensive AMC (CAMC) and FMS Service as per tender terms and conditions and price bid.

Successful Bidder has to follow the following process & timelines:

- Vendor should start project on email confirmation from Architects & Consultants, as final PO may take time.
- Vendor to submit the Shop drawings & Allocate dedicated project / site engineer [who will be single point of contact] within 7-days from the date of Email confirmation.
- Vendor to take approval from consultant on shop drawings in Hard copy within 10 days from date of Email confirmation.

The Comprehensive AMC warranty would be on-site and comprehensive in nature and back-to-back support from the OEM with 24x7 support for the core components. The vendor will warrant all the hardware and software against defects arising out of faulty design, materials and media, workmanship etc. for a period of five years from the date of acceptance of the hardware and software &/or system in general. The vendor will provide support for Operating Systems and other preinstalled software components during the warranty period of the hardware on which these software & operating system will be installed' The Vendor shall repair or replace worn out or defective parts including all plastic parts of the equipment at his own cost including the cost of transport.

#### **51.0 Timely availability of Support Services**

The vendor should have proper and adequate support mechanism in place at Mumbai to provide all necessary support under this project through their own support offices only. The response time for the support / breakdown call should not be more than 4 hours. The Vendor must also have a centralized help desk for logging all service complaints.

#### **52.0 Successful Bidder has to follow the following process & timelines:-**

- Within 3 days against E-mail confirmation of the award of the job, bidder has to submit all shop drawings along with the final make & model of every item, out of the approved makes, to be proposed by him.
- Within 3 days against e-mail confirmation, bidder has to allocate the Project Execution Team / Project Manager (PM) with dedicated project manager at site.



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

- Once Project Manager is appointed for SBI by Bidder, the Project Manager will become the SPOC (Single Point of Contact) for execution related work and for Delivery schedule.
- After preparation of the drawings, PM of Bidder has to take approvals on the same from Architect & SBI.
- Meanwhile, PM is also supposed to give the complete instructions & pre-requisites about the site.
- Once, the above stages are completed, the execution team should be at site within 2 working days & they should commence the works on site
- Once Execution team commences their works at site, within 3-4 working days, PM should give complete report of site technicalities & he also has to give pending or incomplete Pre-requisites if any.
- Then PM has to give daily reports to Team of SBI & Architects.
- Entire Execution Team should be insured at the required value by the bidder
- Entire Team should be at site with all precautionary measures like Safety Shoes, Life Jackets, Helmets etc. Without these, nobody will be permitted to site.
- PLEASE NOTE :  
Bidders can do the site visit to understand the existing AV system installed. Bidders can visit site on Monday to Friday between 11 am to 4 pm. From ..... 2024 to ..... 2024.

During the term of the Contract, Vendor will maintain all the equipment's in perfect working order and condition and for this purpose will provide all the necessary repairs and maintenance services

Free maintenance services (FMS) during the period of warranty & AMC. Professionally qualified personnel who have expertise in the hardware and system software supplied by the vendor will provide these services.

The Bidder shall rectify any defects, faults and failures in the equipment's and shall repair / replace worn out or defective parts of the equipment during working hours i.e. from 8.00 A.M. to 8.00 P.M on all working days (viz. Monday to Saturday). In-case any defects, faults and failures in the equipment could not be repaired or rectified during the said period, the engineers of the VENDOR are required to accomplish their duties beyond the said schedules in case of any situation if it warrants. In cases where unserviceable parts of the equipment need replacement, the VENDOR shall replace such parts, at no extra cost to the BANK, with brand new parts or those equivalent to new parts in performance. For this purpose, the VENDOR shall keep sufficient stock of spares at Bank's premises and at the premises of the VENDOR.

The maximum response time for a maintenance complaint from the site of installation (i.e. time required for Vendor's maintenance engineers to report to the installations after a request call / fax /e-mail is made or letter is written) shall not exceed 4 (four) hours.

The VENDOR shall ensure that faults and failures intimated by Bank as above are set right within 24 hours of being informed of the same. In any case the equipment should be made workable and available not later than the Next Business Day.

The VENDOR shall ensure that the full configuration of the equipment is available to the BANK in proper working condition viz. uptime of 99.5% of the time on a 24x7x monthly basis for purpose of calculating penalty, uptime is calculated as under:



Uptime (%) =  $\frac{\text{Sum of total hours during month} - \text{Sum of downtime hours during month}}{\text{Sum of total hours during the month}} \times 100$

Total hours during the month = No. of working days x 8 hours

(a) Penalties for SLA uptime shall be as under;

Sr. No.	Uptime Range	Penalty
1	99.5% and above	NIL
2	98% and above but below 99.5%	20% of Yearly Warranty Charges
3	96% and above but below 98%	40% of Yearly Warranty Charges
4	94% and above but below 96	60% of Yearly Warranty Charges
5	92% and above but below 94%	80% of Yearly Warranty Charges
6	Below 92%	100%

Vendor shall ensure that the Mean Time between Failures (MTBF) (including any malfunctioning, breakdown or fault) in the Equipment or any part thereof during Contract period, not more than four occasions in preceding 90 days, it shall be replaced by equivalent superior new Equipment or part thereof by Vendor immediately at free of cost during warranty and AMC period'

Preventive maintenance: Vendor shall conduct preventive maintenance (including but not limited to inspection, testing, satisfactory execution of all diagnosis, cleaning and removal of dust and dirt from the interior and exterior of the Equipment and necessary repair of the Equipment once within first 15 days of the installation once within the first 15 days of every alternate month during the currency of the Contract on a day and time to be mutually agreed upon. Notwithstanding the foregoing Vendor recognizes the Bank's operational needs and agrees that the Bank shall have the right to require Vendor to adjourn preventive maintenance from any scheduled time to a date and time not later than 15 working days thereafter.

All engineering changes generally adopted hereafter by Vendor for Equipment similar to that covered by the Contract, shall be made to the Equipment at no cost to the Bank.

(e) Qualified maintenance engineers totally familiar with the Equipment shall perform all repairs and maintenance service described herein.

(f) The Bank shall maintain a register at its site in which, the Bank's operator/ supervisor shall record each event of failure and /or malfunction of the Equipment's and the Vendor's engineer shall enter the details of the action taken in such register. Additionally every time a preventive or corrective maintenance is carried out, the Vendor's engineer shall make, effect in duplicate, a field call report which shall be signed by him and thereafter countersigned by the Banks official. The original of the field call report shall be handed over to the Banks official. The VENDOR shall provide replacement equipment if any equipment is out of the premises for repairs.

Any worn or defective parts withdrawn from the Equipment and replaced by Vendor shall become the property of Vendor and the parts replacing the withdrawn parts shall become the property of Bank. Notwithstanding anything contained contrary, if any hard disk or storage device is required to be replaced, the same shall not be handed over to vendor and same will continue to remain in possession of the Bank.



8. Subject to the security requirement, Vendors maintenance personnel shall be given access to the Equipment when necessary, for purpose of performing the repair and maintenance services indicated in this RFP.

If Bank desires to shift the Equipment to a new site and install it thereof, the Vendor shall be informed of the same. The Bank shall bear the reasonable mutually agreed charges for such shifting and Vendor shall provide necessary arrangement to the Bank. The terms of this RFP, after such shifting to the alternate site and reinstallation thereof would continue to apply and binding on Vendor.

10. The Bank shall arrange to maintain appropriate environmental conditions, such as those relating to space, temperature, power supply, dust within the acceptable limits required for Equipment similar to that covered by this RFP.

During any month if Vendor does not fulfill the provisions of clauses as above, only the proportionate maintenance charges for that period during the month will be considered payable by the Bank without prejudice to the right of the Bank to terminate the contract. In such event if Vendor was credited without deducting the proportionate maintenance charges for that month, the Bank can deduct the same from future payments payable or Vendor shall refund the amount forthwith to Bank on demand by the Bank.

12. Future additions of Hardware / Software:

(a) The Bank would have the right to;  
Shift supplied systems to an alternative site of its choice. Disconnect / connect / substitute peripherals or devices or any equipment / software acquired from another vendor.

Expand the capacity / enhance the features / upgrade the hardware / software supplied, either from Vendor, or third party, or developed in-house provided such changes or attachments do not prevent proper maintenance, from being performed or unreasonably increase Vendor cost of performing repair and maintenance service.

The warranty terms would not be considered as violated if any of the above takes place. Should there be a fault in the operations of the system, Vendor would not unreasonably assume that the causes lie with those components / software if or not acquired from them.

During the contract period of 3 years the vendor should maintain an uptime of minimum 99.5% on monthly basis for all the equipment.

**Please note,**

The Total Cost of Bid or Ownership (TCO) means the total bid value inclusive of the 3-year warranty for all the components, equipments, gadgets etc as supplied & installed by the S.I / contractor. The cost shall also include the 2nd & 3rd Year Comprehensive Annual Maintenance Contract i.e. Comprehensive AMC. Further, for evaluating the bidders, the total bid value including the warranty for 3 years as mentioned herein and comprehensive AMC for 2nd & 3rd year from the date of handover of the project in all respects & to be included and considered, to arrive at the L-1 bidder. Further, the cost towards comprehensive maintenance required during the defect liability period of 12 months is deemed to have been included in the total cost of the bid / ownership.



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

***Annexure – A (Letter to SBI on the vendor's letterhead)***

To  
The Deputy General Manager (Estate),  
State Bank of India,  
Premises Department, Corporate Centre,  
9th floor, State Bank Bhavan,  
Madame Cama Road,  
Mumbai – 400 021.

Dear Sir,

**Sub: SBI's NIT for AV systems in SBI Auditorium Located at Nariman Point, Mumbai.**

With reference to the above NIT, having examined and understood the instructions, terms and conditions forming part of your above inquiry, we hereby enclose our offer for supply of the equipment and services as detailed in your above referred inquiry.

We confirm that the offer is in conformity with the terms and conditions as mentioned in your above referred NIT and enclosures.

We also confirm that the prices offered shall remain fixed for a period of **Six Months** from the date of opening of price bid tender.

We also understand that SBI is not bound to accept the offer either in part or in full. If SBI rejects the offer in full or in part, the SBI may do so without assigning any reasons thereof.

Yours faithfully,

Authorized Signatories

(Name & Designation, seal of the firm)

Date:



**Annexure - B (Vendor profile & other information)**

SL	Parameters	Response
1	Name of the firm/Company	
2	Addresses	
	a) Head Office	
	b) Local Office in Mumbai	
3	Constitution of the Firm (whether Public or private company / firm / Proprietary)	
4	Year of establishment (Supporting document to be submitted)	
5	Names of the Partners/Directors	
6	Name and address of the Principal OEM	
7	Contact person at Mumbai	
	a) Name	
	b) Designation	
	c) Telephone number and Cell Number	
	c) e-mail ID.	
8	Financial parameters	
	Business Results (last Five years)	Turnover in (Rs.) Total turnover      Turnover of AV business      Profit in (Rs.)
	FY-2023-24	
	FY 2022-23	
	FY 2021-22	
	FY 2020-21	
	FY 2019-20	
	<b>(Only company figures need to be mentioned. Not to include group/subsidiary company figures)</b>	<b>(Mention the above amount in INR only)</b>
9	a) Vendor's experience in Audio-Video integration project (in years)	
	Experience in India	
	Vendor's experience in Video-Conference setup (in years)	



SL	Parameters	Response		
	Experience in India			
10	a) No. of Audio-Video integration projects carried out by the company during last Five years in India (give details)			
	Total number of similar projects executed with minimum value of <b>Rs. 1.08 Crores</b> (give details of all works above this minimum limit)	1.		
		2.		
	Total Projects:	3.		
		4.		
		5.		
	Total number of Audio Video Integration System executed with Active LED wall of minimum size as per pre-qualification criteria (give details of all projects above the minimum limit)	Name of the customer & Contact information	OEM of the products	No. of years in use
	Project 1			
	Project 2			
	Project 3			
11	Service Parameters:			
A	No. of qualified engineers employed (Furnish the qualification details with number of engineers under each qualification)			
B	Availability of centralized help desk (if Yes, specify contact details)	Yes / No		
C	Number of own support centers of the Vendor in India			
12	Details of Reference Sites	Customer name	No. of years the customer is using Audio-Video Conference	
	Reference site - 1			
	Reference site - 2			
	Reference site - 3			
	Reference site - 4			
13 (a)	LIST of own support centers across the country.	(Please submit full list of support centers with addresses separately for own centers with details of contact person, contact numbers and email IDs)		





TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

SL	Parameters	Response
14	Name of the SBI / large financial Institutions / Government organization for whom AV project or Video Conference Facility is provided and maintained (give details of setup)	1. 2. 3.
15	Support centre at Mumbai (if yes, please give full address of the support center with Contact person, phone nos. and email ID)	Yes / No
16	Authorization Letters: (Submit all authorization letters if quoting multiple brands) (in the Attached Format only)	Attached (Brand Name(s): Yes/No)
	LED Wall	
	LED wall processor	
	4k AV over IP system	
	MICROPHONES	
	Control Processor	
17.	Registration with Govt. Authorities	
	Income-Tax (PAN) No.	
	GST Regn No.	
	EPF Regn. No	
	ESI Regn. No.	

Note: Please enclose separate sheets for additional information, photographs, and documents

Authorized Signatories

(Name & Designation, seal of the company)

Date:



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

**Annexure – B**  
**BIO-DATA OF THE DIRECTORS/PARTNERS/ KEY ASSOCIATES**

1. Name :

2. Date of Birth :

3. Associates with the organization since:

4. Professional Qualification :

5. Professional Experience :

6. Professional Affiliation :

7. Membership in :

8. Details of Published papers  
in Magazine / Journals (if any) :

9. Details of cost effective methods/  
innovative techniques adopted  
in the projects :

10. Exposure to new materials/  
Technology :

**Signature of Bidder**



**FINANCIAL INFORMATION**

I. Banker Details

Name of the Bank :  
Branch with Address :  
City :  
Contact person in the Bank :  
Contact Details :

II. Details of Chartered Accountant

Name :  
Address :  
Registration details of accountant :  
Contact Number :  
E-mail address :

III. Financial Analysis – Details to be furnished duly supported by figures in Balance Sheet/Profit and Loss Account for the last Five years duly certified by the Chartered Accountant, as submitted by the bidder to the Income-Tax Department (Copies to be attached).

IV. Income Tax clearance Certificate

V. Financial arrangements for carrying out the proposed work

Signature of Chartered Accountant  
with seal

Signature of Bidder(s)  
with Seal



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

**FORM 'B'**

**DETAILS OF ALL 'SIMILAR' WORKS COMPLETED DURING THE LAST SEVEN YEARS ENDING BY 31<sup>st</sup> AUGUST 2024.**

1	2	3	4	5	6	7	8	9	10	11	12
S. No.	Name of work/ project & location	Owner or sponsoring organizations	Date of Agreement with the owner	Scope of work executed	Built up area of the building for which AV work has been done	Cost of project work in Crores	Date of commencement as per contract & actual date of commencement	Stipulated Date of completion & Actual date of completion	Litigation/ Arbitration pending/ In progress with details (if any)	Name and address with contact No. of Officer of client to whom reference shall be made	Remarks

**Signature of Bidder**

Note :

Actual date of completion of the project should be within 7 years ending 31.08.2024 for taking into eligibility consideration.  
The projects mentioned in the above format shall be sorted in the order of cost of the project (Descending order)



**FORM 'C'**

**'SIMILAR' PROJECTS ON HAND - UNDER EXECUTION OR AWARDED**

1	2	3	4	5	6	7	8	9	10	11	12	13
Sl. No	Name of work/project & location	Client / Owner or sponsoring organizations	Type of Client / Owner (Mention Govt / Semi Govt / PSU / Autonomous / Private)	Date of Agreement with the owner	Built up area of the building for which AV work has been done	Cost of project work in Crores	Date of commencement as per contract & actual date of commencement	Stipulated Date of completion	Upto date percentage of progress of work completed	Delay in progress (if any) and reasons thereof	Name and address with contact No. of Officer of client to whom reference shall be made	Remarks (Indicate whether any show cause notice issued or Arbitration initiated during the progress work)

**Signature of Bidder**

Note :

The projects mentioned in the above format shall be sorted in the order of cost of the project (Descending order)



**FORM 'D'**

**DETAILS OF KEY TECHNICAL AND ADMINISTRATIVE PERSONNEL EMPLOYED IN THE ORGANIZATION**

Sr. No.	Designation	Total Number	Names	Educational Qualification	Professional Experience	Length of continuous service with employer in years
1	2	3	4	5	6	7

**Signature of Bidder**

Note:

1. Details of Technical personnel shall be provided qualification-wise
2. Organization chart of the company, additional information about Technical and administrative personnel, if any, may be submitted on separate sheet

**FORM 'E'**



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

**DETAILS OF TOOLS AND EQUIPMENTS  
LIKELY TO BE USED IN CARRYING OUT THE WORK.**

Sr. No	Name of the Tools / Machinery / Equipment	Unit	Make / Model / Capacity or Type	Age in years	Condition of the unit	Ownership Status (mention the quantity)			Current location	Remarks
						Presently owned	To be purchased	Leased		
1	2	3	4	5	6	7	8	9	10	11

**Signature of Bidder**



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

**Annexure – C**

**APPROVED MAKES & MODELS**

<b>S.N.</b>	<b>PRODUCTS</b>	<b>APPROVED MAKES</b>
3	LED wall	<b>LG / Samsung / Barco / Christie/ Extreme media</b>
4	Automation Processor	Extron / Crestron / Kramer / AMX
5	Microphones & Antenna system	BOSCH / Sennheiser / Clock-Audio / Shure
6	Feedback Suppressor	DBX / BOSE / Clock-Audio
7	LED wall processor	Extron /Lightware / AMX / Jupiter
8	HDBT Transmitter & receiver	As per BOQ
9	AV over IP system	Lightware / Extron / AMX / Crestron / Barco
10	USB-C patch cable	Lightware / Extron / AMX / Crestron - As per BOQ
12	Fiber Bulk & Fiber patch cable	Netgear / CISCO / Juniper - AV Over IP OEM approved

Vendor to offer technical inputs on above approved makes and models.





TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

**Annexure-E**

**O.E.MANUFACTURERS AUTHORISATION FORM**  
(in Original Letter Head of OEM)

To  
The Deputy General Manager (Estate),  
State Bank of India,  
Estate Department, Corporate Centre,  
9th floor, State Bank Bhavan,  
Madame Cama Road,  
Mumbai – 400 021.

Dear Sir,

Subject : **Direct Manufacturers Authorization for the Installation**  
Ref : Tender No: \_\_\_\_\_ dated-----

**Name of Work: - -----**

We .....an established and reputable manufacturer of professional  
..... (Product) having Corporate / Registered office at  
.....do hereby authorize .....as our  
Distributor to submit a above bid\_\_\_\_\_dt\_\_\_\_\_ and subsequently negotiate  
and sign the contract with you for the supply of goods manufactured by us.

We hereby confirm and extend our full guarantee and warranty as per standard  
service procedure for the products offered for supply by the above firm only against the  
invitation for bids \_\_\_\_\_dt \_\_\_\_\_ and only duly authorize the said firm to act on our  
behalf in fulfilling any or all installation, technical support and maintenance obligation as  
required by the contract.

Yours faithfully,  
for .....

Signature of Officer Authorized to sign this Document on behalf of the OEM.



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

**TYPICAL TECHNICAL SPECIFICATIONS FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED SERVICES WORKS IN EXISTING AV SET-UP OF THE AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.**

A-1 & A-2	Wireless Tabletop Microphone base & Gooseneck microphone		
	Approved makes : BOSCH / Audio-Technica/Sennheiser / Clock-Audio / Shure		
Sr. No.	particulars	Minimum specifications required to be Matched	Remarks
1	Product	Wireless Tabletop Microphone Base + Gooseneck microphone compatible with wireless receiver mentioned in Sr. No. A-6 in BOQ. System shall be with AES encryption for secured transmission.	
2	Frequency response	75 to 20,000 Hz (+/- 10%)	
3	THD, total harmonic distortion	typ. 0.1 %	
4	Signal-to-noise ratio	> 90 dB(A)	
5	RF output power	adaptive, up to 250 mW (country-specific)	
6	Operating time	typ. 10 hrs.	
7	Dynamic range	> 120 dB(A)	
8	Input impedance	30 kohms	
9	Max. Input voltage	1.7 V RMS	
10	RF sensitivity	< -90 dBm	
11	Sampling rates	24 bit/48 kHz	
12	Other Functions	Easy wireless charging	
		Clear battery life indication via dedicated battery status LEDs	
13	Product	Gooseneck microphone Capsule + Gooseneck.	
		Cardiod/ super-cardioid/interference tube mini shotgun microphone head	
14	Transducer principle (Microphone)	pre-polarised condenser microphone	
15	Pick-up pattern	Cardiod / super-cardioid / lobar	
16	Min. terminating impedance	1 kΩ	
17	Impedance	50 Ω	
18	Frequency response (Microphone)	40 Hz to 20 kHz (+/-10%)	
19	Phantom powering	P12 to P48	
20	Equivalent noise level	23 dB(A)	
21	Equivalent noise level weighted as per CCIR	34 dB(A)	



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

22	Current consumption	250 $\mu$ A	
23	Other Functions.	Highly directional mini shotgun for prominent voice reproduction	
		Interference tube/capsule housing rotates for optimum alignment	
		Corrosion resistant gold plated contact points	
		Smooth response across all frequencies	
24	Gooseneck	min. 36 cm to max. 72cm flexible gooseneck required.	
		Black painted compatible with above microphone capsule & microphone base with 3-pin XLR connectivity	
		RF shielding against intermodulation from wireless equipment/devices	
		L-version with red light ring	
A-3	Supply of Bodypack Transmitter with headworn microphone set.		
	Approved makes : BOSCH / Audio-Technica/Sennheiser / Clock-Audio / Shure		
Sr.No.	particulars	Minimum specifications required to be Matched	Remarks
1	Product	wireless transmitter set with Bodypack transmitter, Headworn microphone & cable, compatible with Receiver mentioned under sr.No. A-6	
2	Frequency response	20 to 20,000 Hz	
3	THD, total harmonic distortion	typ. 0.1 %	
4	Audio input	3,5 mm socket, lockable	
5	Signal-to-noise ratio	> 90 dB(A)	
6	RF output power	adaptive, up to 250 mW (country-specific)	
7	Operating time	Batteries: typ. 10 h	
8	Input voltage range	Mic: 2.2 V RMS Line: 3.3 V RMS	
9	Input impedance	24 bit/48 kHz	
10	Dynamic range	> 120 dB(A)	
		Lockable 3.5 mm jack socket	
		Clear and easy focused user interface	
		Long operation time (up to 10 hours)	
		Advanced power management and Li-Ion rechargeables	
		Secure AES encryption	
		Remote controllable	
		Most comfortable-to-use presenter microphone	
		Outstanding sound quality, omni-directional	



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		Sleek and unobtrusive appearance	
		Extremely lightweight, but sturdy metal frame	
A-4	Wireless Handheld transmitter set with Microphone head		
	Approved makes : BOSCH / Audio-Technica/Sennheiser / Clock-Audio / Shure		
Sr.No.	particulars	Minimum specifications required to be Matched	Remarks
1	Product	Wireless Handheld transmitter set with microphone head compatible with wireless receiver mentioned in BOQ under sr. No. A-6	
2	Frequency response	20 to 20,000 Hz	
3	THD, total harmonic distortion	typ. 0.1 %	
4	Audio input	3,5 mm socket, lockable	
5	Signal-to-noise ratio	> 90 dB(A)	
6	RF output power	adaptive, up to 250 mW (country-specific)	
7	Operating time	Accupack: typ. 15 h Batteries: typ. 10 h	
8	Input voltage range	Mic: 2.2 V RMS Line: 3.3 V RMS	
9	Input impedance	24 bit/48 kHz	
10	Dynamic range	> 120 dB(A)	
11	Features	Automatic frequency and interference management	
		Speech optimized condenser microphone capsule	
		Long operation time (up to 15 hours)	
		Secure AES encryption	
		Remote controllable	
		Advanced power management and Li-Ion rechargeables	
A-5	Network enabled charger featuring four individual charging bays		
	Approved makes : BOSCH / Audio-Technica/Sennheiser / Clock-Audio / Shure		
Sr.No.	particulars	Minimum specifications required to be Matched	Remarks
1	Product	Charging unit to charge above microphone batteries with 4 bays	
2	Charging time	Handheld Transmitter: 2 h	
		Bodypack Transmitter : 2 h	
3	Operating temperature	0 °C to 45 °C (32 °F to 113 °F)	
4	Power supply	12 V	
5	Output voltage	5 V	
6	Charging Current	4x 1000 mA	
7	Features	Seamless network integration	



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		4 individual charging bays	
		Battery status indication for each bay	
		Full remote contro	
A-6	Multi-channel receiver for above Microphones		
	Approved makes : BOSCH / Audio-Technica/Sennheiser / Clock-Audio / Shure		
Sr.No.	particulars	Minimum specifications required to be Matched	Remarks
1	Product	Multichannel receiver with following specifications.	
2	Number of channels	up to 4	
	Audio output	3- pin Phoenix 3.81.mm	
3	Connector	2x RJ-45 Network (Dante and Control)	
4	Power consumption	< 15 W	
5	Frequency	1880 - 1930 MHz	
6	Frequency band	DECT	
7	Frequency range	20 Hz - 20 kHz	
	Mains voltage	44 – 57 V DC via PoE	
	Latency	20 ms (+/-10%)	
	Equalizer	Via Software	
	Automatic gain control (AGC)	yes	
	Diversity principle	Antenna Diversity	
	Encryption	AES	
	Dante™	Primary and Secondary	
	Fatures	Automatic Gain Control	
		Automatic Frequency management	
		AES encryption	
		PoE	
		Analog Mix Output	
		Integrated Automixer	
		Wall, ceiling or mic stand mounting	
A-7	Feedback Suppressor		
	Approved makes : DBX/ BOSE/Clock-Audio		
Sr.No.	particulars	Minimum specifications required to be Matched	Remarks
1	Product	Feedback suppressor	
2	Number of Inputs 2	2	
3	Input Connectors	Female XLR and 1/4" TRS	
4	Input Type	Electronically balanced/unbalanced, RF filtered	

Signature of Contractor with Seal Page



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

5	input Impedance	Balanced 50kΩ	
		Unbalanced 25kΩ	
6	Max input line level	+20 dBu	
7	CMRR	> 40dB typically >55dB @ 1kHz	
8	Number of Outputs 2,	2	
9	Output Connectors	Female XLR and 1/4" TRS	
10	Output Type	Electronically balanced/unbalanced, RF filtered	
B-1	BIS certified LED WALL		
	Approved Makes : Samsung / LG / BARCO/ Xtreme Media / Christie		
<b>Sr No</b>	<b>Description</b>		<b>Qty</b>
1	Pixel Pitch Model : 1.6mm or less Minimum Size: 6m X 2.7m or Higher i.e. 259" Diagonal Resolution: 3840 X 1728 or higher Includes: > LED Cabinets size as per OEM > Controller as per Screen Requirement > High Standard Cabinet i.e. Die Casting Magnesium or Aluminium Material, Light Weight Cabinet i.e. 26 Kg per sqm or less, Slim Cabinet i.e. 40mm or less > Viewing Angle 160 / 160 > Refresh Rate 3840 Hz or more > Minimum Brightness 800 nits or more > Lifetime 1,00,000 hours or more, Contrast 5000:1 or more, International Certifications: EMC Class-B, FCC, CE, Fire Protection BS476, REACH, ROHS		1
<b>Sr. No.</b>	<b>Item Description</b>		<b>Compliance Yes/No</b>
1	Supply Installation and Commissioning of Active LED Wall of Minimum 6m x 2.7m size with 1.57 mm or less Pixel Pitch as per following technical specifications complete in all respect		
	<b>Physical Parameters</b>	Total Resolution of Screen	<b>3840 x 1728 or more</b>
		Diagonal Size	<b>259" or higher [+/- 5%]</b>
		Pitch pitch	<b>Should be between 1.5 mm ~ 1.6mm</b>
		Pixel Configuration	3 in 1 SMD
		Weight per Square Meter (kg/m <sup>2</sup> )	26 or less
		Physical Pixel Density (pixels/m <sup>2</sup> )	409600 or more
		Flatness of Unit Case (mm)	±0.1 or less
		Cabinet Depth	<b>40mm or less</b>
		Unit Case material	Die casting Aluminium or Die Casting Magnesium
		Service access	Front
	<b>Optical Specifications</b>	Minimum Brightness ( After Calibration)	<b>800 cd/m2 or more</b>

Signature of Contractor with Seal Page



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		Color Temperature	3500 - 9000 or better	
		Visual Viewing Angle (Horizontal)	160 or more	
		Visual Viewing Angle (Vertical)	160 or more	
		Brightness Uniformity	97% or more	
		Color Uniformity	±0.003CxCy	
		Contrast Ratio	5000 or more:1	
		Processing Depth (bit)	14 or more	
		Power Consumption (W/m <sup>2</sup> , Max.)	750 or less	
		Power Supply (V)	100 to 240	
		Frame Rate (Hz)	50 or more	
		Refresh Rate (Hz)	<b>3840 or more</b>	
<b>Certifications</b>	International Certifications/ Test Reports	<b>EMC Class-B as per EN 55032:2015</b>		
		FCC as per FCC Part 15 Subpart B:2018		
		CE-LVD as per EN 62368-1:2014 + A11:2017		
		<b>Fire Protection as per BS476</b>		
		<b>REACH Certification</b>		
<b>Operation Specifications</b>		<b>ROHS Certification</b>		
		Lifetime	100000 hr or more	
		Operating Temperature	-10° to +45°	
		Operating Humidity	0~80%RH	
		IP rating Front	<b>IP30</b>	
<b>LED Controller of same Make as LED Screen with Original OEM Software for Configuration</b>		IP rating Rear	<b>IP30</b>	
		Inputs	HDMI HDCP 2.2, DP	
		Controller of Same Make as LED Screen	Yes	
		Resolution Supported	3840x2160 @ 60HZ or better	
		Output Pixel	8.2 Million or more	
		Control Ports	RS232C Loop and LAN	
		LAN Output	Minimum 16 or more	
		Temperature Sensor	Yes	
		Chrome Adjustment	Yes	
		Original LED Configuration Software of LED Screen OEM	Yes	
		Brightness Adjustment	Yes	
		Scaling	Yes	
		HDR	Yes	
		Operating System	Yes	
Signal Redundancy Support	Yes			

Signature of Contractor with Seal Page



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

	<b>OEM Eligibility</b>	OEM Should have registered office in India from last 10 years		
		ISO Certification of OEM		
		OEM Must have Service Center in state		
		OEM Should have Valid GST Number in india		
B-3 & B-4	VIDEO WALL PROCESSOR with HDBT receiver			
	Approved Makes : Extron /Lightware / AMX / Kramer / Jupiter			
<b>Sr No</b>	<b>Description</b>	<b>Specifications</b>		<b>rema rks</b>
1	Video Inputs	Number/signal type	4 HDMI/DVI	
			1 HDMI/DVI (Live Background)	
		Connectors	4 female HDMI type A	
			1 female HDMI type A (Live Background)	
		Horizontal frequency	15 kHz to 270 kHz	
		Vertical frequency	24 Hz to 240 Hz	
		Standards	DVI 1.0, HDMI 1.4 and 2.0, HDCP 1.4 and 2.3	
2	Video Processing			
		Digital sampling	30 bit, 10 bits per color, 600 MHz pixel clock maximum	
		Maximum video data rate	17.82 Gbps (5.94 Gbps per color)	
		Colors	1 billion (10 bit processing with full 4:4:4 sampling)	
3	Video Output			
		Number/signal type	1 HDMI/DVI	
			1 DTP2/XTP/HDBT configurable	
		Connectors	1 female HDMI type A	
			1 female RJ-45	
		Power for active cables	250 mA for the HDMI output	
		Vertical frequencies	23.98 Hz 24 Hz, 25 Hz, 29.97 Hz, 30 Hz, 50 Hz, 59.94 Hz, 60 Hz	
		Standards	DVI 1.0, HDMI 1.4 and 2.0, HDCP 1.4 and 2.3	
4	Audio	S/N	>90 dB, at maximum output (unweighted)	
5	Audio Input		HDMI embeded x 5 Nos.	

Signature of Contractor with Seal Page





TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

6	Audio Output	Number/signal type	1 balanced or unbalanced stereo (stereo or dual mono channels)	
		Connectors	1 HDMI, embedded (1) 3.5 mm captive screw, 5-pole	
		Impedance	50 ohms unbalanced, 100 ohms balanced	
		Maximum level	>+21 dBU balanced, >+15 dBV unbalanced	
5	Third party control	Serial control port	1 RS-232 on captive screw connector on back panel	
		Ethernet control port	1 female RJ-45 connector	
		Ethernet data rate	10/100/1000Base-T, half and full duplex with auto detect	
6	Other	Memory	4 GB flash	
		USB control port	1 USB, female mini USB B on front panel	
		USB version	USB 2.0	
		USB protocols	Ethernet over USB (RNDIS)	
7	<b>HDBT receiver</b>			
		Maximum data rate	10.2 Gbps (3.4 Gbps per color)	
		Maximum pixel clock	300 MHz	
		Resolution range	Up to 2560x1600* @ 60 Hz or 4K (4096x2160) @ 30 Hz	
		Color bit depth	8, 10, or 12 bits — subject to the maximum data rate limit	
		Standards	DVI 1.0, HDMI 1.4, HDCP 2.3, CEA-861E	
	Transmitter & receiver communication	Input Connectors	1 female RJ-45 per unit	
		Termination standard	TIA/EIA T568B	
		Signal transmission distance		



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		1080p @ 60 Hz	Up to 330' (100 m) using shielded twisted pair (STP) cable.	
		2560x1600 @ 60 Hz	Up to 330' (100 m) using shielded twisted pair (STP) cable.	
		4K/UHD @ 30Hz and 60 Hz	Up to 330' (100 m) using shielded twisted pair (STP) cable.	
		Cable requirements	Solid conductor, 24 AWG or better	
		Cable recommendations	400 MHz bandwidth, STP (shielded twisted pair)	
	Video Output	Number/signal type	1 single link HDMI (or DVI-D*)	
		Connectors	1 female HDMI type A	
B-5	98" LED Display (TV) [Left & Right Side LED walls]			
	Approved Makes : Samsung / LG / Panasonic / Sony			
<b>Sr No</b>	<b>Description</b>			<b>Qty</b>
1	Supply of min 98" Diagonal Display (TV), Edge LED or Direct LED, with following minimum specifications.			2
<b>Sr No</b>	<b>Description</b>			<b>Compliance</b>
1		Native Resolution	UHD (3840x2160)	
		Size of the TV	Min. 98" diagonal	
		Contrast ratio	Native 5000:1 or Higher	
		Application	24x7 application	
		Brightness	Min. 500 nits	
		Min. Number of ports	HDMI x 2 Nos., Audio Digital / Analog, RS232, LAN, Audio Output Digital/Analog,	
		Aesthetics	Slimmest Blade type panel for best appearance. Tilttable installation.	
B-6	55" LED Display (TV) [Left & Right Side LED walls]			
	Approved Makes : Samsung / LG / Panasonic / Sony			
<b>Sr No</b>	<b>Description</b>			<b>Qty</b>
1	Supply of min 55" Diagonal Display (TV), Edge LED or Direct LED, with following minimum specifications.			1
<b>Sr No</b>	<b>Description</b>			<b>Com</b>



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

				<b>pliance</b>
1		Native Resolution	UHD (3840x2160)	
		Size of the TV	Min. 98" diagonal	
		Contrast ratio	Native 5000:1 or Higher	
		Application	24x7 application	
		Brightness	Min. 350 nits	
		Min. Number of ports	HDMI x 2 Nos., Audio Digital / Analog, RS232, LAN, Audio Output Digital/Analog,	
		Aesthetics	Slimmest Blade type panel for best appearance. Tilttable installation.	
	B-7 & B-8 to be quoted as per the brief specification mentioned in the BOQ.			
B-9	Cloud & IP Calls enabled CODEC & 8" Touch panel.			
	Approved Makes : Poly			
<b>Sr No</b>	<b>Description</b>			<b>Qty</b>
1	Supply of IP & Cloud conference compatible CODEC, 8" Touch panel & 3 years partner premium services.			1
<b>Sr No</b>	<b>Description</b>			<b>Compliance</b>
1		VIDEO STANDARDS AND PROTOCOLS	H.264 AVC, H.264 High Profile, H.265	
		VIDEO RESOLUTION	w576p from 512 Kbps to 4K, 30 fps (TX and RX) from 2048 Kbps	
		Content Video Resolution	From XGA to UHD (3840x2160)	
		CONTENT SHARING	Poly Content App support, Apple AirPlay, Miracast, 1x HDMI input	
		Video Input ports	1x HDCI, 1x HDMI, 3x USB, Camera switching via touch interface	
		Video output ports	2x HDMI • Touch display compatible	



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		AUDIO INPUT	<ul style="list-style-type: none"> <li>• Up to three 1x IP microphone arrays (20 ft pickup range each)</li> <li>• 1x HDMI</li> <li>• 1x 3.5 mm stereo line-in</li> <li>• USB support for Biamp, Shure, QSC, and Extron audio DSPs</li> </ul>	
		Audio Output	<ul style="list-style-type: none"> <li>• 1x HDMI</li> <li>• 1x 3.5 mm stereo line-out</li> </ul>	
		Other Interfaces	<ul style="list-style-type: none"> <li>• 3x USB 3.0</li> <li>• 1x USB-C</li> <li>• 1x RS-232, 8-pin mini-DIN</li> <li>• Bluetooth 5.02</li> <li>• WiFi 802.11a/b/g/n/ac (MIMO) Multichannel Concurrency2</li> </ul>	
		Other Facilities	Wireless content sharing, Bluetooth, Thirdparty control or interface for wireless Touch panel.	
		Touch panel	<p>Capacitive touch sensor supports multi-touch functionality</p> <p>Direct API command through network</p> <p>LCD panel with LED backlighting</p> <p>IPS (In-Plane Switching)</p> <p>Display: 8-inch screen, POE</p> <p>Aspect ratio: 16 x 10</p> <p>Resolution: WXGA (1280 x 800)</p> <p>Designed with built-in stand support—no external stand required</p> <p>Viewing angle: 75 degrees (U/D/L/R)</p> <p>Positioning/placing angle: 60 degrees</p> <p>Tap and touch control to access call controls and administrative menus</p> <p>Intuitive user interface</p>	



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

B-10	Camcorder		
	Approved Makes : Sony / Panasonic / Canon		
<b>Sr No</b>	<b>Description</b>		<b>Qty</b>
1	Camcroder with HDMI output & in-built recording.		1
<b>Sr No</b>	<b>Description</b>		<b>Compliance</b>
1	Product	Camcorder compatoble with Manfratto make tripod stand [mentioned in B-11)	
	Optical Zoom	Min. 25x	
	Output	HDMI or Mini HDMI	
	Audio	External Analog Audio input	
	Lens	ZEISS Varioto-sonnar T Lens or Equivalent	
		F-NUMBER (MAXIMUM APERTURE) F2.4(W)-4.0(T)	
		CLEAR IMAGE ZOOM (STILL IMAGE), 20M Approx. 50x/10M Approx. 70x/5M Approx. 100x/VGA Approx. 380x, CLEAR IMAGE ZOOM (MOVIE), 4K: Approx. 37.5x; HD: Approx. 50x, DIGITAL ZOOM (STILL IMAGE), 20M Approx. 100x/10M Approx., 140x/5M Approx. 200x/VGA Approx. 380x, DIGITAL ZOOM (MOVIE), Digital Zoom Approx. 100x, FILTER DIAMETER 72 mm	
	B-11 & B-13 to be quoted as per the brief specification mentioned in the BOQ.		
B-12	Wireless Presentation System compatible with iOS/Android/Windows without any software support		
	Approved Makes : Kramer / Barco / Extron		



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

Sr No	Description		Qty
1	<b>Wireless Presentation System compatible with iOS/Android/Windows without any software support</b>		1
			<b>Compliance</b>
Sr No	Description		
1	Product	Wireless Presentation Device	
2	Output	1 x HDMI	
3	LAN	Gigabite LAN Ethernet	
4	Audio	audio de-embedding feature with USB	
5	Connection	, Wireless Connection for up to 252 user devices, present minimum 2 users laptops or handheld devices on a single display at a time	
6	Connection	iOS 11 or later / Windows 10 or later /Android 9 of later versio device without any required app/device	
7	External easy connectivity buttons	To be supplied with 2 x USB buttons	
C-1	AV over IP Uncompressed AV Over IP Encoder / Decoder [Av over Fiber]		
	Approved makes : Lightware / Extron / AMX / Crestron / Barco		
Sr.No.	particulars	Minimum spcifications required to be Matched	Remarks
1	Product	4k@4:4:4 Av over IP Encoder & DECODER with Audio embedding & de-embedding	
2	Maximum resolution (600MHz)	4096x2160@60Hz/4:4:4	
		Uncompressed video up to 18 Gbps datarate (600 MHz pixel clock)	
3	Link	10G or better	
4	Optical / CTA6	Yes [Either Both or any one]	
5	HDMI Port version	HDMI2.0 [HDMI 2.0, HDMI 1.4 and DVI 1.0 compliant, Automatic or adjustable video format conversion (DVI, HDMI or HDMI deep color),]	
6	Nr. of video inputs	2 [Matrix Inputs]	



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

7	Nr. of video outputs	2 [Matrix outputs]	
8	USB HID (KVM)	Yes	
9	Audio embedding and de-embedding	Yes	
10	Audio support	high bitrate audio,	
11	Balanced stereo analog audio I/O ports	Yes	
12	IR I/O and RS.232 control ports	Yes	
13	1 Gbps Ethernet	Yes	
14	Nr. of fibers (W/STANDARD SFP +)	4	
15	Nr. of fibers (W/BIDI SFP +)	2	
16	Software Features		
17	4K scaling	Yes	
18	Framerate conversion	Yes	
19	4K UHD @ 60Hz 4:4:4	Yes	
20	30 bit deep color support	Yes	
21	Audio embedding and de-embedding	Yes	
22	Advanced did management	Yes	
23	HDCP 2.2 compliant	Yes	
24	Seamless switching	Yes	
C-2	AV over IP Uncompressed AV Over IP Encoder / Decoder [Av over Fiber]		
	Approved makes : Lightware / Extron / AMX / Crestron / Barco		
Sr.No.	particulars	Minimum specifications required to be Matched	Remarks
1	Product	4k@4:4:4 Av over IP Encoder & DECODER	
2	Maximum resolution (600MHz)	4096x2160@60Hz/4:4:4	
		Uncompressed video up to 18 Gbps datarate (600 MHz pixel clock)	
3	Link	10G or better	
4	Optical	Yes [Either both or any one]	
4a	CAT6	Yes [Either both or any one]	
5	HDMI Port version	HDMI2.0 [HDMI 2.0, HDMI 1.4 and DVI 1.0 compliant, Automatic or adjustable video format conversion (DVI, HDMI or HDMI deep color),]	
6	Nr. of video inputs	2 [Marix Inputs]	
7	Nr. of video outputs	2 [Matrix Outputs]	



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

8	USB HID (KVM)	NO	
9	Audio embedding and de-embedding	NO	
10	Audio support	high bitrate audio, including Dolby TrueHD, Dolby ATMOS and DTS-HD Master Audio,	
11	Balanced stereo analog audio I/O ports	NO	
12	IR I/O and RS.232 control ports	NO	
13	1 Gbps Ethernet	Yes	
14	Nr. of fibers (W/STANDARD SFP +)	4	
15	Nr. of fibers (W/BIDI SFP +)	2	
16	Software Features		
17	4K scaling	Yes	
18	Framerate conversion	Yes	
19	4K UHD @ 60Hz 4:4:4	Yes	
20	30 bit deep color support	Yes	
21	Audio embedding and de-embedding	NO	
22	Advanced edid management	Yes	
23	HDCP 2.2 compliant	Yes	
24	Seamless switching	Yes	
C-3	Ethernet based Matrix management unit		
	Approved makes : Lightware / Extron / AMX / Crestron / Barco		
Sr.No.	particulars	Minimum specifications required to be Matched	Remarks
1	Product	Ethernet based matrix management unit	
2	Minimum Features Required	Advanced error handling and logging with time code	
3		Advanced EDID Management	
4		Intuitive control software for device configuration	
5		Multiple TCP/IP connections	
6		Device control via Ethernet (TCP/IP)	
7		Built-in website for device configuration	
8		Firmware upgrade through Ethernet	
C-4	OEM approved Ethernet Switch		
	Approved makes : Netgear / CISCO / Juniper		
Sr.No.	particulars	Minimum specifications required to be	Remarks

Signature of Contractor with Seal Page





TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		Matched	
1	Product	Ethernet switch for AV over IP	
2	Minimum Features Required	Stackable Managed Switch with 24 Ports SFP+ - IT Core & AV-over-IP,	
3		Zero Touch AV-over-IP Pre-configured for Out-of-Box L2	
4		Multicast (SDVoE-ready),	
5		No Delay - Non-Blocking Fabric for Near-Zero Switch Latency For Av Over IP	
6		Prevent network flooding with effortless multicast implementation of Layer 2 Multicast	
7		Dedicated Design for ProAV [AV over IP] Engineering Services for AV Network Design and Install Support	
C-5 To C-11	As per the BOQ Templet & consultant's approval		
E-1	Automation Processor		
	Approved Makes : Extron / Crestron / Kramer / AMX		
Sr No	Description	Specifications	remarks
	Product	Automation processor with Quad core processor with Following specifications.	
1	Memory	SDRAM	2 GB
		Flash	8 GB
2	Ethernet	Network interface controllers (NICs)	2: 1 LAN, 1 AV LAN
		Connectors	2 female RJ-45 connectors
		Data rate	10/100/1000Base-T, half/full duplex with autodetect
		Protocols	DHCP, DNS, HTTP (redirect), HTTPS, ICMP, IEEE 802.1X, NTP, SFTP, SMTP, SNMP, SSH, TCP/IP, UDP/IP
3	Serial Ports		
		Quantity/type	2 bidirectional RS-232, RS-422, RS-485 (ports 7 and 8)
			6 bidirectional RS-232 (ports 1 through 6)
4	Flexible I/O Ports		



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		Quantity/type	4 analog input or digital input/output (configurable)	
5	IR or 1-way serial			
		Quantity/type	8 programmable: unidirectional RS-232 ( $\pm 5$ V), or TTL level (0 to 5 V) infrared (carrier and non-carrier) up to 300 kHz	
6	Relay ports			
		Quantity/type	8 normally open relays	
		Relay control contact rating	24 VDC, 1 A	
7	OEM expansion port			
		control ports	(1) 3.5 mm captive screw connector, 5 pole (uses 4 poles)	
		[Proprietary port]		



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

## **UN-PRICED BID**

**(TO BE FILLED BY THE SYSTEM INTEGRATOR FOR  
MAKES & MODELS)**



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

**UN-PRICED BID**

**(TO BE FILLED BY THE SYSTEM INTEGRATOR FOR MAKES & MODELS)**

**For Civil Works – Kindly refer the List of approved makes. Since the works pertains to works contract, for Civil works, the System Integrators are requested to adhere to the list of approved makes and not to quote any make or model number / catalogue number herein under**

<u>Sl. No</u>	<u>Product</u>	<u>Description</u>	<u>Make</u>	<u>Model</u>	<u>Estimated Delivery timelines</u>	<u>Quoted Make</u>	<u>Quoted Model</u>	<u>UOM</u>	<u>Qty</u>
<b>WORKS WITHIN THE AUDITORIUM BLOCK</b>									
<b>MICROPHONES &amp; Accessories</b>									
A-1	Mic Gooseneck with Base with Button	SITC of wireless Gooseneck microphone base compatible with Gooseneck microphones mentioned in A-2, Microphone base should be with rechargeable battery, base should be with button & LED indicator to show the status, Should be compatible with A-6 Reciever	BOSCH / Sennheiser / Clock-Audio / Shure	SL Tablestand 133-S DW or Equivalent				NOS	7
A-2	Mic Head for above GN & Base.	SITC of Supercardioid pick-up directional capsule with @ min. 36 cm to 72 cm, gooseneck, should be compatible with Microphone base mentioned in A-1 & comaptible with wireless receiver mentioned in Sr. No. A-6	BOSCH / Sennheiser / Clock-Audio / Shure	ME36 + MZH 3040 or Equivalent				NOS	7



A-3	Body-pack Transmitter for Headworn or Lapel mic	SITC of The bodypack transmitter shall be for use with a companion receiver as part of a wireless RF transmission system and shall operate in the license-free 1.9 GHz band (frequency ranges shall be from 1,880 to 1,930 MHz depending on country-specific regulations). The headset microphone shall have an adjustable, visuallyunobtrusive neckband and an extremely thin microphone boom that shall be adjustable in length. The frequency response of the headset microphone shall be 20 Hz-20,000 Hz (± 3 dB) and sensitivity shall be 5 mV/ Pa (± 3 dB). Nominal impedance at 1 kHz shall be 1 kΩ, with a min. terminating impedance of 4.7 kΩ. Maximum SPL shall be 143 dB, equivalent noise level shall be 27 dB(A).	BOSCH / Sennheiser / Clock-Audio / Shure	SL Bodypack - HM 1 KIT DW-3				NOS	2
A-4	Handheld Mic with built-in Transmitter	SITC of The handheld transmitter shall be for use with a companion receiver as part of a wireless RF transmission system and shall operate in the license-free 1.9 GHz band (frequency ranges shall be from 1,880 to 1,930 MHz, depending on country-specific regulations).The AF frequency response shall range from 50 – 20,000 Hz. The dynamic range shall be > 120 dB(A). Total	BOSCH / Sennheiser / Clock-Audio / Shure	SL HANDHEL D 865 DW-3-EU				NOS	4



		<p>harmonic distortion (THD) at 1 kHz shall be typical 0.1 %. Signal-to-noise ratio shall be &gt; 90 dB(A). RF output power shall be adaptive and up to 250 mW (country-specific). The transmitter shall have automatic sensitivity adjustment. The transmitter shall be powered by either one Sennheiser Lithium-Ion rechargeable accupack with a typical operating time of 15 hours or with an optional battery case for two 1.5 V AA size batteries.</p>							
A-5	Charging unit for Mics	<p>SITC of network enabled charger featuring four individual charging bays. These can either be used for the SL Bodypack DW or the SL Handheld DW. Each bay is combined with 4 LEDs to indicate the corresponding battery status of the mobile device.</p>	<p>BOSCH / Sennheiser / Clock-Audio / Shure</p>	CHG 4N				NOS	2
A-6	Multi-channel receiver for above mics	<p>SITC of The multi-channel receiver shall be for use with up to four companion transmitters as part of a wireless RF transmission system. The receiver shall operate in the license-free 1.9 GHz band (frequency ranges shall be from 1,880 to 1,930 MHz, depending on country-specific regulations) and shall use automatic frequency management to find and select the best available frequency in the spectrum and to automatically start</p>	<p>BOSCH / Sennheiser / Clock-Audio / Shure</p>	SL MCR 4DW				NOS	4



		<p>the transmission. The receiver shall be available as a 2-channel version and a 4-channel version. The receiver shall have a discreet design with fully integrated antennas. With the supplied mounting adapter it shall be mountable to a wall, a ceiling, a tripod or a VESA 100 mount. The receiver shall have two RJ-45 network sockets for power supply (Power over Ethernet: PoE IEEE 802.3af Class 3) and remote control via a control software solution like the Sennheiser Control Cockpit or a media control system (e. g. Crestron and AMX). The two RJ-45 network sockets shall also output digital audio signals to a Dante™ audio network. The receiver's AF frequency response shall range from 20 – 20,000 Hz. The dynamic range shall be &gt; 120 dB(A). Total harmonic distortion (THD) at 1 kHz shall be typical 0.1 %. Signal-to-noise ratio shall be &gt; 90 dB(A). The receiver's RF sensitivity shall be -90 dBm. RF output power of the receiver's back channel shall be adaptive and up to 250 mW.</p>							
		<b>FEEDBACK SUPPRESSOR</b>							



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

A-7	Feedback Suppressor	SITC of Feedback suppressor, Number of Inputs 2, Input Connectors Female XLR and 1/4" TRS, Input Type Electronically balanced /unbalanced, RF filtered, input Impedance Balanced 50kΩ, Unbalanced 25kΩ, Max input line level +20 dBu, CMRR > 40dB, typically >55dB @ 1kHz, Number of Outputs 2, Output Connectors Male XLR and 1/4" TRS, Output Type Electronically balanced/unbalanced, RF filtered	DBX / BOSE / Clock-Audio	AFS2 or equivalent				No	1
		<b>VIDEO SYSTEM</b>							
		<b>VIDEO WALL WITH PROCESSOR &amp; Accessories</b>							
B-1	LED wall	SITC of LED wall of 6meter x 2.7 Meter, Technology : SMD 3 in 1, Pixle Pitch Min. 1.5 Max. 1.6, Each Module Resolution : 198 W X 108 H, Each module Size : 300 mm W x 168.75mm H, Cabinet made up of 4 nos of Modules (2x2), cabinet resolution : 384 w x 216 H, Cabinet Dimmensions : 600 mm W X 337.5mm H x 35mm Depth, Cabinet material : Die casting Aluminium Alloy, Service access : Front [Mandatory- no rear access available at site], Min. Brightness [After calibration] : 800 nits., Visual Viewing angle : 160 x 160 degrees, Brightness uniformity : Min. 97%, Contrast ratio : Min. 5000:1, 14 bit	LG / Samsung / Barco / Christie/ Extreme media	LSCB015 or Equivalent				NO	1





TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		processing, Lifetime : 100000 Hours @ 50% brightness, Operating Temperature : -10 to +45 deg., maximum Thermal Dissipation 512 BTU / cabinet, Total Size of LED wall : 2.7 Meter X 6 Meter, Total resolution min. 3840W x 1728mm H, to be supplied with all required Sending & receiving cards, all reuquired other accessories. Item to be quoted with min. 5% relacing spares., BIS certification is mandatory. the LED wall to be supplied with Wall mounting structure of MS with powder quoted & colored.							
B-2	Wall processor	SITC of LED wall processor with min. 4 HDMI inputs 4K/60 HDMI Multi-Window Processor with HDBT extention, Display up to four source windows on a single canvas with a live or static background, HDMI background input HDMI and DTP2 outputs, Supports resolutions up to 4K/60 @ 4:4:4, Supported HDMI 2.0 specification features include data rates up to 18 Gbps, Deep Color up to 12-bit, and HD lossless audio formats, Advanced 4K scaling engine, Can be easily created windows using existing Extron Control system.	Extron /Lightware / AMX / Jupiter	MGP641 or Equivalent				NO	1



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

B-3	Long Distance HDMI receiver	SITC of Long Distance DTP Receiver for HDMI, Receives HDMI plus control and analog audio up to 330 feet (100 meters) over a shielded CATx cable, Supports computer and video resolutions up to 4K, Supported HDMI specification features include data rates up to 10.2 Gbps, Deep Color up to 12-bit, 3D, HD lossless audio formats, and CEC pass-through, Compatible with above Processor Output	Extron /Lightware / AMX / Jupiter	DTP3 R 201 or Equivalent					NO	1
		<b>DISPLAYS TO BE MOUNTED ON SIDE WALLS</b>								
B-4	LED Display (TV) for side walls	SITC of min 98" LED Display, 4K (3,840 x 2,160),Direct (Full Array LED) OR Edge LED, Professional Slim display panel, Native Contrast Ratio 5000:1 or Better, Processing with 4K Upscaling, Motion Clarity, TRILUMINOS PRO technology, Brightness min. 500 nits, 24/7 Portrait / Landscape ,Tilt functionality ,Response time 7ms, Flexible Content Layout with HTML5, 16GB On Board Storage, HDCP 2.3 (HDMI) / RS232 / USB / RJ45 Viewing angle 178 degree,	LG / Samsung / Panasonic / Sony	98BZ40J or Equivalent					Nos	2
		<b>DISPLAY AS STAGE MONITOR VIEWING</b>								



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

B-5	55" LED display	SITC of 55" LED display, wall mountable, min. 350 nits brightness, min. 4000:1 contrast ratio, min. 1 x HDMI 2.0 port, 1 x HDMI 1.4/HDMI 2.0 port, To be installed with standard VESA mount	LG / Samsung / Panasonic / Sony	55BZ30j or Equivalent				No	1
B-6	Customised Trolley	SITCy of customised trolley to mount 55" Display in slanting position to use display as self confidence monitor for stage dignitories. Trolley should be with wheels & easily movable on stage. The trolley should be max. 10-12" From front & 18~20" From back, [to generate @ 30 to 35 degrees angle towards Stage dignitories]. Trolley should be of MS with black powder quoted & to be maintained properly	SI	custom				No	1
		<b>TELEPROMPTER</b>							
B-7	Teleprompter	SITC of Portable Teleprompter with a bright 15" 4:3/16:9 LCD screen that can be seen outdoors and includes a V-Mount battery slot to power. Should have port to expand or daisy chain multiple units using HDMI / Ethernet network. Should be with proper stand & Glass mounted.	Data Video / Prompter People / Mirror Image / iKANCORP	TP800 or Equivalent				No	1
		<b>WIRELSS PRESENTATION DEVICE</b>							



B-8	Wireless Presentation System	SITC of wireless presentation device with support to iOS / Android / Windows devices can share the presentation without downloading any software, to be supplied with 2 wireless dongles & should share min. 2 simultaneous sources on display.	Wolfvision/ Barco / Kramer / Extron / Crestron	VIA Connect2 or Equivalent				No	1
		<b>MINI-PC</b>							
B-9	Mini CPU	SITC of Mini CPU with 13th Gen Intel® Core™ i7-13700T (30 MB cache, 16 cores, 24 threads, 1.40 GHz to 4.80 GHz Turbo, 35W), Windows 11 Pro built-in, memory 16 GB, 1 x 16 GB, DDR5, harddrive 256 GB, M.2 2230, PCIe NVMe, SSD, Class 35, with Min. 2 Nos. of x USB3.1 & 2 Nos x USB2.0 ports, 1 x HDMI Output, 1 x Analog Audio Output port.	Lenovo / DELL / hp	OptiPlex 7010 Micro Form Factor Plus OR Equivalent				No	1
		<b>Video conference System</b>							
B-10	VC CODEC with Touch panel	SITC of Video conference CODEC, CODEC capable for IP calling & Teams & Zoom certified with VIDEO STANDARDS AND PROTOCOLS H.264 AVC, H.264 High Profile, H.264 SVC, H.265, RTV, H.239, H.264 video error concealment, VIDEO INPUT • 1 x HDCI • 1 x HDMI • 1 x USB1, VIDEO OUT • 2x HDMI • Touch Display Compatible, To be supplied with min. 8" Touch panel, NETWORK • IPv4 support • 1 x 10/100/1G Ethernet • Auto-MDIX •	Poly / CISCO	G7500 or Equivalent				No	1



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		3x 10/100/1G LLN supporting POE+/PSE • H.323 and/or SIP up to 6Mbps,							
B-11	Partner Premium	SITC of partner premium support services for above system [including all accessories] for 3 years.	Poly / CISCO					No	1
B-12	HDMI Grabber card	SITC of HDMI to USB grabbing card, Input Port x 1 HDMI, 1x Stereo (3.5mm), Output Port : 1x HDMI, 1x USB 3.0 (Type-B), Video HDMI Compliance :HDMI 2.0 (DVI 1.0), HDCP Compliance: 2.2 bypass, Input Signal Type 4K@60 8bit YUV 4:4:4, HDR 12, Output Signal Type 4K@60 8bit YUV 4:4:4, HDR 12	Cypress / Extron / Crestron / Lightware	CUSB-V604H				No	1
		<b>SWITCHING SYSTEM</b>							
		<b>AV OVER IP ENCODER / DECODER WITH CONTROLLER &amp; SWITCH</b>							
C-1	4K Uncompressed AV over IP Encoder/Decoder with Audio De-embedding	SITC , of AV over IP Uncompressed AV Over IP Encoder / Decoder, 4096x2160@60Hz/4:4:4 maximum resolution (600MHz), Uncompressed video up to 18 Gbps datarate (600 MHz pixel clock), HDMI +Audio+ Control over 1 X Fiber out OR 1 x CAT6 output [we need both or either CAT6 or Fiber] & Fiber/CAT6 port to Audio embedding and de-embedding, Adjustable analog audio settings (volume, gain, balance), Support for high bitrate audio, Master Audio,	Lightware / Extron / AMX / Crestron / Barco	UBEX-PRO20-HDMI-F110 or Equivalent				NO	1



		Command injection on RS-232 and IR ports, HDCP 2.2 and HDCP 1.4 compliant with cross conversion capabilities HDMI 2.0, HDMI 1.4 and DVI 1.0 compliant, Automatic or adjustable video format conversion (DVI, HDMI or HDMI deep color), Each Encoder/Decoder has 2 HDMI Inputs & 2 HDMI outputs, extends Full 4K Uncompressed AV signals over 1 Fiber port or CAT6 port							
C-2	4K Uncompressed AV over IP Encoder/Decoder	SITC , of AV over IP Uncompressed AV Over IP Encoder / Decoder, 4096x2160@60Hz/4:4:4 maximum resolution (600MHz), Uncompressed video up to 18 Gbps datarate (600 MHz pixel clock), HDMI +Audio+ Control over 1x Fiber out or 1 X CAT6 out [we need both or either Fiber or CAT6 ports] & Fiber/CAT6 port to , Adjustable analog audio settings (volume, gain, balance), Support for high bitrate audio, including DOLBY rated Master Audio, Command injection on RS-232 and IR ports, HDCP 2.2 and HDCP 1.4 compliant with cross conversion capabilities, HDMI 2.0, HDMI 1.4 and DVI 1.0 compliant, Automatic or adjustable video format conversion (DVI, HDMI or HDMI deep color), Each Encoder/Decoder has 2 HDMI Inputs & 2 HDMI outputs, extends Full 4K Uncompressed AV signals	Lightware / Extron / AMX / Crestron / Barco	UBEX-PRO20-HDMI-F100 or Equivalent				Nos	11



		over 1 Fiber port or CAT6 port							
C-3	AV Over IP controller box	SITC of Matrix Management Unit for above AV over IP units	Lightware / Extron / AMX / Crestron / Barco	UBEX-MMU-X50 or Equivalent				No	1
C-4	10G fiber switch	SITC of Stackable Managed Switch with min. 24 Ports Ethernet switch - IT Core & AV-over-IP, Zero Touch AV-over-IP Pre-configured Or Programmable for Out-of-Box L2 Multicast (SDVoE-ready), No Delay - Non-Blocking Fabric for Near-Zero Switch Latency For Av Over IP, Prevent network flooding with effortless multicast implementation of Layer 2 Multicast, Dedicated Design for ProAV [AV over IP] Engineering Services for AV Network Design and Install Support. [Bidders to quote the appropriate ethernet switch which will be compatible with the quoted AV over IP Encoders & Decoders]	Netgear / CISCO / Juniper	M4300-24XF or equivalent				No	1
		<b>PATCH CABLES &amp; ACCESSORIES</b>							
C-5	Fiber Patch cables	SITC of 3m Passive SFP+ OR CAT6 Direct Attach Cable, Passive or active SFP+/CAT6 connector on both ends replacing SFP+/CAT6 transceivers providing the highest performance, pre-terminated twin-axial or duplex fiber optic/CAT6	Netgear / CISCO / Juniper	AXC763 or equivalent				Nos	40



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		cable.							
C-6	Fiber cable	SITC of 50 mtr, 6-core [3-piar] Fiber patch cable from AV rack [operator Room] to back stage AV rack OM3 MM cable	BELDEN / Schnieder					Nos	2
C-7	Patch cable	SITC, of Standard HDMI (M) to HDMI (M) Cable 6 ft	Kramer / Extron	C- HM/HM/PIC O/BK-6				Nos	22
C-8	Patch cable	SITC of USB-C cable, min. 3ft USB-C cable, 2m long USB Full-Featured Type-C cable for USB 3.1 Gen1 Highlighted features, 4 Lane Displayport Alt mode (4K60FPS Video and Audio), USB 3 Gen1 5Gbps "SuperSpeed" (4K Webcam, SSD storage), Supporting peripherals via USB 2.0 up to 480 Mbps (Mouse, Keyboard, Thumb Drive, Speakerphone and Webcam), 60Watt / 3A charging and eMarker (Fast Charging of Laptops, tablets and phones)	Lightware / Extron / AMX / Crestron	CAB- USBC- T200A				Nos	2
C-9	Bulk cable	SITC of Sheilded Twisted Pair Cable 305m spool	BELDEN / Schnieder	7815A / Actassy				SPOOL	2
C-10	Patch cable	SITC of Accessories & Other patch cables like Fiber patch cables 5 mtr Each x 20 Nos, Accessories, Installation material, connectors, wall plates etc.	Custom	Custom				LS	1





		<b>DIMMER FOR AUDIENCE AREA DOWNLIGHTS</b>							
C-11	DALI Dimmer	SITC of Dimmer for Audience lights, Compatible with a range of DALI fittings and devices – Including DALI drivers, DALI electronic low voltage transformers and DALI LED fixtures, Inbuilt diagnostic functionality, DMX Rx Channels 192, Control Channel Outputs 3 x DALI Addressing	Dynalite / Lutron / Crestron	DDBC-320- DALI or Equivalent				No	1
C-12	Button	SITC of 6-Button button panel with button panel interface, communicates on Ethernet port or proprietary port over single cat6 cable with DALI dimmer	Dynalite / Lutron / Crestron	PA6BPE- WW-X + DACM-V4 OR Equivalent				No	1
		<b>Stage Lighting System</b>							
C-13	LED par lights	SITC of RGBW stage lights, LED PAR 54X3w RGBW DMX with connecting 1 mtr cord and XLR Connector 2 nos, DMX 512 supported to control using existing Controller, Power Consumption : 180W, Beam Angle : 25° Spread, LED Source : SMD Based, Available CCT : 3200K ~ 5600K - 54 x 3W, CRI (Ra) : >95, TLCI : >91, R9 Value : >95 LED par lights	MarkRich / Leksa / Canara / Espro	54x3 LED PAR				Nos	4



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

C-14	Moving head lights	SITC of Moving head lights, Moving Head DMX 575 Sharpy with connecting 1 mtr cord and XLR Connector 2 nos, LED Source : 260W High Output LED, Power Consumptions : 350W Beam Angle : 5-27 deg, Control Modes :, Manual Dimming/ DMX Dimming	MarkRich / Leksa / Canara / Espro	LK MH 12R or Equivalent				Nos	2
		<b>CONTROL SYSTEM</b>							
D-1	Automation Processor	SITC of Quad-core processor and four times more memory with 2 GB of RAM and 8 GB of Flash, 2 separate LAN processing AV LAN & Corporate LAN, Six bidirectional RS-232 serial ports with software handshaking , wo bidirectional RS-232/RS-422/RS-485 serial ports with hardware and software handshaking, Eight IR/Serial ports for one-way control of external devices, Four Flex I/O ports, Eight relays for controlling room functions, Proprietary E-bus for connecting OEM accessories, Four independently switched 12 VDC outputs , Ethernet monitoring and control on each Ethernet port, Supports 10/100/1000Base-T, Integrated IR learner capability, Should support Existing Link license of Existing processor or include the cost of new Link license for Apple iPad. SShould support to existing	Extron / Crestron / Kramer / AMX	IPCP Pro 555 xi or Equivalent				No	1



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		wired Touch panel							
		<b>BUY BACK OF THE SYSTEM</b>							
E-1	Video wall display	buy back of Screen Size 55", Resolution 1,920 x 1,080 (FHD), Brightness 500cd/m <sup>2</sup> , Input HDMI, DP, DVI-D, OPS, Audio, USB 2.0, USB3.0, RGB, Output DP, Audio, External Control RS232C, RJ45, IR Receiver, Bezel Width 0.9mm (Top/Bottom/Left/Right even bezel) / 1.8mm *B to B : Panel Bezel + Panel Bezel, Monitor Dimension (W x H x D) 1,211.4 x 682.2 x 86.5mm, VESA™ Standard Mount Interface 600 x 400mm. To be organised in 4x5 Display wall matrix [Working condition]	Christie	FHD-553-XE				Nos	12
E-2	Video wall display	buy back of Screen Size 55", Resolution 1,920 x 1,080 (FHD), Brightness 500cd/m <sup>2</sup> , Input HDMI, DP, DVI-D, OPS, Audio, USB 2.0, USB3.0, RGB, Output DP, Audio, External Control RS232C, RJ45, IR Receiver, Bezel Width 0.9mm (Top/Bottom/Left/Right even bezel) / 1.8mm *B to B : Panel Bezel + Panel Bezel, Monitor Dimension (W x H x D) 1,211.4 x 682.2 x 86.5mm, VESA™ Standard Mount Interface 600 x 400mm. To be organised in 4x5 Display wall matrix [Working condition- has lines on the display]	LG	equivalent to above				Nos	2



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

E-3	Mounts for above wall	Buy back of Wall mount bracket, Quick release latch - easily activates & unlock mode to secure displays in place firmly., Pop out lock system, Pop out extension-easily pulls out for installation and maintenance, Multi dimensional micro adjustment-enables precision alignment of the video wall configuration including depth, height and tilt	Logic	LG-VW-04				Nos	20
E-4	LED Display wall Data management Processor cum switcher	Buy back of Video wall Processor cum Matrix switching capability processor with Videow wall manager Software, Minimum 18 Multi -format inputs over DVI (HDCP compliant) with 39 outputs on Multi-format DVI (HDCP compliant). 20 Nos of Outputs are for Video wall displays wiht all video wall functionality & 9 other outputs are for matrix switching. Any of the inputs can be pushed to Any output device. Please note, special functionality to Send the combination of any 2 or 3 inputs on any of the displays. Please read the specifications as attached. The entire processor should be scalable & can be expandable for additional inputs & outputs,	Christie	Phoenix / CMS solution / Indisys Extensity VIDEO WALL PROCESSOR				Nos	8
E-5	Podium & On-satge Table microphoens	Buy back of The vertical Array of tiny element based Microphone for desktop applications for round table discussions, podiums, tele/video	Beyerdynam ic					Nos	6



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

		conferencing and lecterns. should be possible for two people to share one microphone.		CLASSIS RM 30					
		<b>SERVICES</b>							
F-1		Warranty services by OEM 3 Years OEM warranty on Supplied material from the date of Handover of the project. The above prices should be with 3 years OEM warranty support.							
F-2		Bidder to include the 3 years Service warranty in the above price. On site service cost to be included in SITC price.							
F-3		Operating manpower from handover till 3rd year, for Sound system, stage lighting & Stage drapery work.	SI	Custom				per year	3
		<b>SERVICES FOR OLD AV SYSTEM ALREADY INSTALLED (TO BE CONSIDERED AS AUDITORIUM WORKS IN TOTO)</b>							
G-1		1st Year Comprehensive AMC of Old System from the date of new system handover [Old system BOQ is in Tenderwith the status of each equipment]	SI	Custom				per year	1
G-2		2nd Year Comprehensive AMC of Old System from the date of new system handover [Old system BOQ is in Tenderwith the status of each equipment]	SI	Custom				per year	1



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

G-3		3rd Year Comprehensive AMC of Old System from the date of new system handover [Old system BOQ is in Tender with the status of each equipment]	SI	Custom				per year	1

**Note:** 1. Rates quoted shall include all other Taxes such as Sales Tax, VAT, Excise, Octroi, LBT etc including transportation charges, loading, unloading etc, however excluding GST( Rates shall be exclusive of GST), which shall be additional at actuals.

2. Bidder must visit the site and check the space, site condition, shifting of materials before quoting the bid.



TENDER FOR SYSTEM INTEGRATORS FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF NEW ACTIVE LED WALL BY REPLACING THE OLD VIDEO WALL, ADDITIONAL MICROPHONES & ALLIED CIVIL, INTERIOR & SERVICES WORKS IN EXISTING AV SET-UP FOR AUDITORIUM OF STATE BANK OF INDIA AT SB BHAVAN, MADAME CAMA ROAD, NARIMAN POINT, MUMBAI.

**END OF DOCUMENT**