

Date: 23.09.2016

Dear Sirs,

Sub: Request for Quotation for Supply, Installation and Maintenance of Video conferencing system for Indian Bank Zonal Office, Upper Ground Floor, World Trade Centre, Babar Road, Connaught Place, New Delhi.

### Tender Reference No. IB/ND/VC/2/2016-17 Dated 23.09.2016

Indian Bank invites sealed quotations for supply, installation and Maintenance of Video Conferencing Equipments for our Bank. Part-I of the quotation will consist of Earnest Money deposit and Technical Bid and Part-II will consist of the commercial bid.

Interested Bidders may submit their quotation for the supply, installation and maintenance of Video Conferencing equipments as specified in Part-I as per the following procedure. Please note that your quotation is subject to the terms and conditions mentioned below.

### I. Procedure for submission of Quotation:

- 1) Part I contains compliance details of the specifications given in Annexure-I for which quotation is called for. Part I enclosed to this letter should be filled and kept in envelope marked "Technical quote for supply, installation and maintenance of Video Conferencing Equipments at Indian bank zonal office New Delhi. Part I Due on 14.10.2016 at 15.00 Hours". No column shall be left blank or altered
- 2) Part II (Annexure II) shall be submitted after Technical Bid is approved. Part II should be filled and kept in envelope marked "Commercial quote for supply, installation and maintenance of Video Conferencing Equipments at Indian bank zonal office New Delhi. Part II Due on 14.10.2016 at 15.00 Hours". The price to be quoted should include cost of equipments, duties, levies, freight, insurance, warranty, AMC etc and exclusive of VAT/CST, octroi/entry tax and buyback cost of old equipments.
- 3) Part I & Part II to be submitted in original duly signed by the Authorised Signatory under the seal of the company in every page. Any correction should be authenticated by the same signatory. If insufficient or false information is furnished and/or if there is any deviation or non-compliance of the stipulated terms and conditions, the quotations will be liable for rejection. The price quoted should be unconditional and should not contain any strings attached thereto. Quotes, which do not conform to our specifications, will be liable for rejection and offers with a higher configuration will not attract any special consideration in deciding the vendor.
- 4) Part I & Part II envelopes shall be inserted in a bidder envelope marked "Quotes for supply, installation and maintenance of Video Conferencing Equipments at Indian bank zonal office New Delhi. To be Opened on 14.10.2016 at 15.00 Hours"

And sent to:

Assistant General Manager, Indian Bank, Zonal Office, Upper Ground Floor, World Trade Centre, Babar Road, Connaught Place, New Delhi – 110001,

So as to reach within the time stipulated as above (i.e 15.00 hours on 14.10.2016).

Late quotes will be summarily rejected and will not be opened.

The Technical quotations will be opened at 15:30 Hrs on 14.10.2016.



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**5)** Bank has the right to accept or reject any quotation/cancel the tender at its sole discretion without assigning any reason therefor.

### 6) PRE-BID MEETING

a. A pre-bid meeting is scheduled to be held at the following address at 11.00 hours IST on **30.09.2016.** Bidder's designated representatives (maximum two `persons) may attend the pre-bid meeting.

Indian Bank Zonal Office, Upper Ground Floor, World Trade Centre, Babar Road, Connaught Place, New Delhi – 110001

b. The purpose of the meeting will be to clarify the doubts raised by the probable bidders and to visit the site for installing the Video Conference equipments by the bidders.

The bidder is requested to submit any queries/clarifications to the Bank one day before the date of meeting to <a href="mailto:zonewdelhi@indianbank.co.in">zonewdelhi@indianbank.co.in</a>

The text of the questions raised (without identifying the source of enquiry) and the responses given, together with amendment to the tender document, if any, will be ported in our web site and informed to the bidders who have raised queries in writing.

### 7) ELIGIBILITY CRITERIA

The bidder must satisfy the following minimum criteria:

- a. The Bidder should be a Limited Company and should be in existence in India with at least 5 years of experience in supply, installation and maintenance of video conference systems.
- b. The Bidder's annual turnover for last three financial years should not be less than Rs. 2 Crores.
- c. The Bidder should have supplied at least 10 numbers of Room based Video Conferencing Equipments (of the same make proposed to Indian Bank) to banks/Financial Institutions/Government Offices during the last 1 year, i.e. 01.09.2015 to 31.08.2016 (multiple orders from the same client are accepted).
- d. The Bidder should have their service support centre in Delhi. The Postal Address of the service centres should be provided with technical quote.
- e. Bidder should be either the OEM (Original Equipment Manufacturer) of the video conferencing main system or authorized supplier of the OEM. Manufacturer's authorization letter in the enclosed format shall be submitted along with the quote (Annexure VII).

### 8) BID SECURITY (EARNEST MONEY DEPOSIT) AND COST OF TENDER DOCUMENT

- a) The Bidder shall furnish Bid Security for Rs.1,00,000/- in the form of a Bank Guarantee in the form provided in the Tender Documents or Demand Draft, favoring Indian Bank, along with Part I and valid for a period of 135 days from the last date for submission of quotes (Annexure V).
- b) Cost of tender Documents Rs.2,000/- in the form of DD favoring Aakaar to be submitted along with Part I.
- **9) Validity of Contract:** Successful bidder shall maintain the equipments for an initial contract period of 5 years from the date of installation under warranty and AMC contract periods mentioned below. Bank reserves the rights to renew the AMC contract after the expiry of 5 years at mutually agreed terms and conditions. Bank also reserves the right to engage a different service provider for the AMC.



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### 10) Warranty & AMC:

All the equipments installed except the video wall will be under a comprehensive onsite warranty of 1 year from the date of installation and AMC has to be renewed for subsequent four years after warranty. Warranty period of 3 years shall be applicable for the Video wall and AMC shall be applicable for  $4^{th}$  and  $5^{th}$  years. The AMC payments are payable in arrears at the end of each half year.

During the periods of comprehensive warranty & AMC, supplier shall be responsible for replacement of any faulty module or parts of the system, except in the cases of physical damages caused after installation of the equipments. No component of the video conferencing system is exempted from the above clause.

#### **II. EVALUATION**

The equipments offered should meet all the technical specifications as stipulated in the quote (PART I). The bidder should agree all Terms and Conditions. If the Part – I of the quote submitted by the bidder is not complying, then the commercial quote (Part-2) submitted by them will not be considered for evaluation. Technically qualified bidders alone will be informed about the date and time of opening the commercial quotes. Lowest quoted (L1) vendor will be identified as the successful bidder, subject to the other terms and conditions of the tender document.

#### III. SCOPE OF THE PROJECT AND CONDITIONS OF CONTRACT

The scope of the Project includes the following.

- 1. Supply, installation, interconnection, wiring and maintenance of the complete system as per Annexure I at Indian Bank Zonal Office, New Delhi.
- 2. Establishing Videoconferencing Facility. The successful bidder shall commission the proposed systems.
- 3. Training the Bank personnel in the zonal office on the operations of the equipment and communications links and also about the basic troubleshooting methods. A detailed document covering all these aspects is to be given.
- 4. Maintenance of all the equipments for a total period of 5 years,

### **IV. TIME FRAME FOR COMPLETION OF PROJECT:**

- a. The delivery and installation of the entire system should be completed within four weeks from the date of receiving the Purchase Order.
- b. **Liquidated Damages:** If the Supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the Bank shall, without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% of the invoice price of the equipments to a location for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of 10%. The date of delivery of the last item to a location will be taken as the date of delivery for entire set of system to that location, for the purpose of calculation of liquidated damages. The Bank may consider termination of the contract, if the equipments are not delivered as per delivery schedule.

### V. TERMS OF PAYMENT

On Delivery: 80% payment will be made at Zonal Office New Delhi within 15 days on submission of documents as below, along with request letter.

- i) A copy of the Invoice showing order number, goods description, quantity, unit price, total amount sent to the office.
- ii) Acknowledgement of receipt of goods from the Bank's Representative.



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- iii) Copy of Storage-cum-erection policy.
- iv) Copy of Transit insurance policy.

On installation: 20% payment will be made at Zonal Office New Delhi within 15 days on submission of Installation Certificate (**Annexure - VI**) signed by the Bank's Representative.

The AMC payments are payable in arrears at the end of each half year, on submission of request at Zonal Office Delhi.

### VI. INSURANCE

The goods are to be insured by supplier for an amount equivalent to 110% of the invoice value for Transit. The Supplier should also insure the goods for the invoice value under Storage Cum Erection Policy till three months from the date of delivery.

In case of discrepancy in hardware/software supplied, it is supplier's responsibility to replace/repair the systems immediately even without recourse to the insurance.

### VII. SERVICE LEVEL AGREEMENT (SLA)

During the Warranty and AMC period the fault should be rectified on the next business day and replacements if any should be provided within two days. If there is delay, Rs.500/- per day per equipment will be levied as penalty from third day onwards. The penalty for non compliance of SLA terms will be recovered from the subsequent AMC Payments or out of performance Guarantee amount

#### **VIII. NEGOTIATION**

Bank reserves the right to negotiate on the price offered or freak rates with the L1 vendor under exceptional circumstances.

#### IX. MANUALS

Manuals and CD media, explaining the features of the equipment shall be supplied along with the equipment at no extra cost. Statutory licenses are to be provided to the bank, wherever applicable.

### X. INDEMNITY CLAUSE

If at the time of your supplying, installing the equipment in terms of the present contract/order or subsequently it appears at any point of time that an infringement has occurred of any patents, trademarks or other rights claimed by any third party, then in respect of all costs, charges, expenses, losses and other damages which the Bank may suffer on account of such claim, the supplier shall indemnify the Bank and keep it indemnified in that behalf.

#### X. PERFORMANCE GUARANTEE

Within 15 days of issue of purchase order, the successful bidder should furnish a Bank Guarantee equivalent to 10% of the total project cost valid for a period of 63 months as Performance Security (Annexure III).

#### XI. TERMINATION FOR CONVENIENCE

The Bank, by 30 days written notice sent to the successful bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Bank's convenience, the extent to which performance of the successful bidder under the Contract is terminated, and the date upon which such termination becomes effective.



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#### XII. TERMINATION FOR DEFAULT

The Bank, without prejudice to any other remedy for breach of contract, by 7 days written notice of default sent to the Successful bidder, may terminate this Contract in whole or in part:

- a) if the Successful bidder fails to deliver any or all of the deliverables within the period(s) specified in the Contract, or within any time extension thereof granted by the Bank; or
- b) if the successful bidder fails to perform any other obligation(s) under the Contract
- c) If the Successful bidder, in the judgment of the Bank has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

In the event the Bank terminates the Contract in whole or in part, the Bank may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Successful bidder shall be liable to the Bank for any excess costs for such similar Goods or Services. However, the successful bidder shall continue performance of the Contract to the extent not terminated.

#### **XIII. SETTLEMENT OF DISPUTES**

- 1. If any dispute or difference of any kind whatsoever shall arise between the Bank and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such disputes or difference by mutual consultation.
- 2. If after 30 days the parties have failed to resolve their disputes or difference by such mutual consultation, then either the Bank or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.
- 3. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the goods under the contract.
  - Arbitration proceedings shall be conducted in accordance with the following rules of procedure.

The dispute resolution mechanism to be applied shall be as follows:

- (a) In case of dispute or difference arising between the Bank and a domestic Supplier relating to any matter arising out of or connected with this agreement, such dispute or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Bank and the Supplier; the third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding Arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the Arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the Indian Banks' Association, which appointment shall be final and binding on the parties.
- (b) If one of the parties fails to appoint its arbitrator within 30 days after receipt of the notice of the appointment of its Arbitrator by the other party, then the Indian Banks' Association, both in cases of the Supplier and the Bank, shall appoint the Arbitrator. A certified copy of the order of the Indian Banks' Association making such an appointment shall be furnished to each of the parties.
- (c) Arbitration proceedings shall be held at New Delhi, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.



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- (d) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the Arbitral Tribunal. However, the expenses incurred by each party in connection with the preparation, presentation etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.
- 4. Notwithstanding any reference to arbitration herein,
  - a) The parties shall continue to perform their respective obligation under the contract unless they otherwise agree; and
  - b) The Bank shall pay the supplier any monies due to the supplier

#### **XIV. JURISDICTION**

Any dispute arising out of this contract will be under the jurisdiction of Courts of Law in New Delhi.

## XV. PERIOD OF VALIDITY OF QUOTES

Quotes shall remain valid for the period of 90 days after the last date for submission of quote prescribed by the Bank. A quote valid for a shorter period shall be rejected by the Bank as non-responsive.

### **XVI. IT ACT 2000**

The equipments to be quoted as per this tender should comply with the requirements under Information Technology Act 2000 and subsequent amendments and related Government/Reserve Bank India guidelines issued from time to time.

#### XVII. ACCEPTANCE OF PURCHASE ORDER AND CONTRACT FORM:

Purchase Order will be issued to L 1(lowest quoted) vendor. Acceptance should be submitted by the vendor within 3(three) days from the date of receipt of Purchase Order. Contract Form should be submitted within 15 days of issue of Purchase order.

### **XVIII. SIGNING OF SERVICE LEVEL AGREEMENT:**

Successful bidder has to sign a service level agreement with the Bank, which contains the terms and conditions of the tender document.

## XVIII. CHECK LIST OF DOCUMENTS TO BE SUBMITTED TO ESTABLISH THE ELIGIBILITY:

	T	T
No.	Eligibility Criteria	Document to be submitted
1	The Bidder should be a Limited Company	1) Copy of certificate of Incorporation or
	and should be in existence in India with	Registration Certificate.
	at least 5 years of experience in supply,	2) Copy of Purchase Order received from any
	installation and maintenance of video	client before 01.09.2011 or certificate from the
	conference systems.	client stating 5 years experience.
2	The Bidder's annual turnover for last	Copies of Audited balance sheets for the
	three financial years should not be less	financial years 2013-14,2014-15 and 2015-16
	than Rs. 2 Crores.	
3	The Bidder should have supplied at least	
	10 numbers of Room based Video	banks/Financial Institutions/Government Offices
	Conferencing Equipments (of the make	during the period 01.09.2015 to 31.08.2016
	proposed to Indian Bank) to	and the supply certificate issued by the same
	banks/Financial Institutions/Government	client.
	Offices during the last 1 year, i.e.	
	01.09.2015 to 31.08.2016	
4	The Bidder should have their service	Details of Registration of the support centre in
	support centre in Delhi. The Postal	Delhi



	Address of the service centres should be provided with technical quote.	
5		Manufacturer's authorization letter in the enclosed format shall be submitted along with the quote (Annexure VII).



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#### **ANNEXURE I**

### PART-I Technical Bid

To Date:

Assistant General Manager Indian Bank Zonal office, Upper Ground Floor, World Trade Centre Babar Road, Connaught Place, New delhi

Dear Sir,

Sub: Supply, installation and maintenance of Video Conferencing Equipments.

Reference: Tender No. IB/ND/VC/2/2016-17 Dated 23.09.2016

Referring to your above tender document calling for quotations, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to undertake the videoconferencing project, and submit our quotation.

### **SPECIFICATIONS OF THE EQUIPMENTS**

### **Video System**

SI. No		Description	Qty	Specification Offered: (Specify Make & Model for each item)	Complied with Bank's Spec. (Yes / No)
1		tion, Testing & Commissioning Conferencing Main Systems	1		
	No. of sites	Min. 3 sites using in-built multi-site endpoint feature with each site at 720p resolution			
	Camera	Camera with 1/3" CMOS/CCD with Capability for capturing video in poorly lit rooms. Camera mount to be provided.			
	Output Pixels (H x V)	1920 x 1080			
	Frame Rate	Minimum 60 fps			
	Zoom	12X optical zoom with 12X digital zoom			
	Horizontal Viewing Angle	Minimum 65°			
	Pan/Tilt Angle	Pan ±90°/Tilt+/-15°			
	Preset Position	Minimum 25 positions			
	Other features	It should be able to register on the existing Gate Keeper available at Indian Bank's Head Quarter Chennai & Seamlessly work with the existing infrastructure setup at Bank (Polycom CMA 4000).			



	The PTZ camera and codec		
	should be of same		
	manufacturer.		
	It shall be possible to see both		
	the near and far site on one		
	Screen thus making most		
	efficient use of a single display		
	area.		
	In-built DSP to eliminate		
	feedback and echo.		
	The unit should be capable of		
	supporting other video features		
	like content sharing through		
	direct physical link with the		
	system or via LAN.		
	Full function IR / RF Remote		
	Control with batteries		
	Brief details on the VC		
	recording facility and its setup		
	shall be provided.		
Video Quality	Full HD (1080p)		
•	` ' '		
Video Standards	H.263, H.263+, H.263++, H.264		
	Baseline Profile, H.264 High Profile, MPEG-4 SP@L3 (SIP only)		
	` ,		
	H.460.18, H.460.19 Firewall		
Audia Ctandarda	Traversal		
Audio Standards	G.711, G.722,G.722.1		
	Mono (11kHz@64/96kbps), MPEG-4		
Caroon lavout	AAC-LC Mono (22kHz@96kbps).		
Screen layout	Screen Layout Full Screen / PinP / PandP / PandPandP / Side by Side		
Network	TCP/IP, UDP/IP, DHCP, DNS,		
Protocol	HTTP, TELNET, SSH, SNMP, NTP,		
FIOLOCOI	ARP, RTP/RTCP, PPPoE, UPnP,		
	Protocol Stack IPv4, IPv6, Bit Rate		
	64 kbps to 4,096 kbps,		
H.239	YES 1080 / SXGA / WXGA / 720 /		
Presentation	XGA @30fps,		
Video	The unit should have minimum 2		
Input/output	video inputs first to HD camera, and		
mpawoutput	Content (DVI-I or equivalent) and At		
	least 2 No. of HDMI/DVI outputs to		
	connecting to high definition display		
	devices and recording devices.		
Other	• VGA		
connectors	• S Component (videos)		
2000.0.0	15 pin d-connectors (Camera to VC)		
	Processor)		
	• USB 3.0		
Audio	Input:		
Input/output	Microphone Input (quoted)		
10	system should support up to		
	4 mics)		
	• 2 X Mics (VC omni-		
	directional HD MICS)	1	
	directional HD MICS) should be provided		
	should be provided		
	should be provided  • 1 PC Audio /Aux port		
	should be provided		



1	Other audio	Echo Cancellation		
	features to be	Automatic gain control		
	supported	_		
	Gapportoa	Automatic noise suppression		
		Adaptive post filtering		
	Bandwidth / IP Features	H.323/SIP up to 6 Mbps point to point		
		Support H.320 up 2 Mbps through		
		gate keeper.		
		Packet Loss Recovery feature on		
		H.323 call		
		SIP up to 4 Mbps in addition to		
		H323 protocol.		
		Calls can be made on SIP or H323		
		without having to restart or		
		reconfigure the endpoint.		
	Network	Gigabit Ethernet (10BASE-		
	Interface	T/100BASE-TX/1000BASE-T, IPv6		
	Interruce	compatible) – 1 No.		
	User Interface:	The system should support		
	Osci interiace.	Password protected system		
		menu.		
		Directory Services.		
		•		
		Web-based System     Management SNMB V2 system		
	Malia	Management- SNMP V3 support.		
	Make	Make: SONY/POLYCOM/AVER /CISCO/Panasonic		
	SITC of Hydraulia		7	
2	Site of Hydraulic	Pop Up Box on Conference Table:	7	
	VIDEO INPUT/OUT	FDLIT		
	1 pass-through VG			
	1 pass-through HD			
		HD female to 15-pin HD female on a 6"		
	(15 cm)	TID female to 13-pin FID female on a o		
	` '			
	pigtail HDMI female to HD	MI formale on a 40" (OF and) mistail		
		JIVII Temale on a TU (25 cm) biotali		
	AUDIO INPUT/OU	DMI female on a 10" (25 cm) pigtail TPUT		
	1 pass-through ster	TPUT		
	1 pass-through ster	TPUT		
	1 pass-through ster Connectors 3.5 mm screw	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10"	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive (25 cm) pigtail		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive (25 cm) pigtail PUT		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" <b>DATA INPUT/OUT</b> Standards CAT 6, 7	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail PUT TIA/EIA T568B		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" <b>DATA INPUT/OUT</b> Standards CAT 6, 7 Connectors 1 fema	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive (25 cm) pigtail PUT		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" <b>DATA INPUT/OUT</b> Standards CAT 6, 7 Connectors 1 fema <b>POWER</b>	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail PUT  TIA/EIA T568B le RJ-45 to 1 female RJ-45		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" <b>DATA INPUT/OUT</b> Standards CAT 6, 7 Connectors 1 fema <b>POWER</b> 125 VAC, 50-60 Hz	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail PUT FIA/EIA T568B le RJ-45 to 1 female RJ-45 r, 12 A max.		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" <b>DATA INPUT/OUT</b> Standards CAT 6, 7 Connectors 1 fema <b>POWER</b> 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail PUT FIA/EIA T568B le RJ-45 to 1 female RJ-45 r, 12 A max.		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" <b>DATA INPUT/OUT</b> Standards CAT 6, 7 Connectors 1 fema <b>POWER</b> 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power	reo, unbalanced of TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail  PUT  TIA/EIA T568B Ile RJ-45 to 1 female RJ-45  z, 12 A max. z, 10 A max.		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" <b>DATA INPUT/OUT</b> Standards CAT 6, 7 Connectors 1 fema <b>POWER</b> 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail PUT TIA/EIA T568B le RJ-45 to 1 female RJ-45 z, 12 A max. z, 10 A max.		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, 7 Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail PUT TIA/EIA T568B le RJ-45 to 1 female RJ-45 z, 12 A max. z, 10 A max. rnal C, 50-60 Hz		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, 7 Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 1	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail PUT TIA/EIA T568B le RJ-45 to 1 female RJ-45 z, 12 A max. z, 10 A max. chal C, 50-60 Hz A		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, 7 Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 1	TPUT reo, unbalanced n TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail PUT TIA/EIA T568B le RJ-45 to 1 female RJ-45 z, 12 A max. z, 10 A max. rnal C, 50-60 Hz		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, 7 Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 1 Power output USB:	TPUT reo, unbalanced in TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail PUT  FIA/EIA T568B Ile RJ-45 to 1 female RJ-45  z, 12 A max. z, 10 A max. z, 10 A max.  Thal C, 50-60 Hz A 5 VDC, 2.1 A, 10.5 watts total		
	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, 7 Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 12 Power output USB: (Make: Extron / C	reo, unbalanced in TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail  PUT  FIA/EIA T568B Ile RJ-45 to 1 female RJ-45  Z, 12 A max. Z, 10 A max. Z, 10 A max.  Final C, 50-60 Hz A 5 VDC, 2.1 A, 10.5 watts total  Frestron / AMX / Kramer)		
3	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, 7 Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 1 Power output USB: (Make: Extron / C SITC of Switcher	reo, unbalanced of TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail  PUT  TIA/EIA T568B Ile RJ-45 to 1 female RJ-45  2, 12 A max. 2, 10 A max. 3 for all C, 50-60 Hz A 5 VDC, 2.1 A, 10.5 watts total  restron / AMX / Kramer)  Should be controllable through front	1	
3	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, 7 Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 1 Power output USB:  (Make: Extron / C SITC of Switcher panel source selections of the surrous selection of the surrous selec	reo, unbalanced of TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail  PUT  TIA/EIA T568B Ile RJ-45 to 1 female RJ-45  2, 12 A max. 2, 10 A max.  rnal C, 50-60 Hz A 5 VDC, 2.1 A, 10.5 watts total  restron / AMX / Kramer)  Should be controllable through front tion switches with provision for RS232C	1	
3	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, 7 Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 1 Power output USB:  (Make: Extron / C SITC of Switcher panel source selections of the surrous selection of the surrous selec	reo, unbalanced of TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail  PUT  TIA/EIA T568B Ile RJ-45 to 1 female RJ-45  2, 12 A max. 2, 10 A max. 3 for all C, 50-60 Hz A 5 VDC, 2.1 A, 10.5 watts total  restron / AMX / Kramer)  Should be controllable through front	1	
3	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 1 Power output USB:  (Make: Extron / C SITC of Switcher panel source select & contact Closure as	reo, unbalanced in TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail  PUT  IIA/EIA T568B le RJ-45 to 1 female RJ-45  z, 12 A max. z, 10 A max.  rnal C, 50-60 Hz A 5 VDC, 2.1 A, 10.5 watts total  restron / AMX / Kramer)  Should be controllable through front tion switches with provision for RS232C and also using IR / RF remote Control.	1	
3	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 1 Power output USB:  (Make: Extron / C SITC of Switcher panel source select & contact Closure at Resolution range	reo, unbalanced in TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail  PUT  IIA/EIA T568B le RJ-45 to 1 female RJ-45  2, 12 A max. 2, 10 A max. 2, 10 A max. 3 VDC, 2.1 A, 10.5 watts total  restron / AMX / Kramer)  Should be controllable through front tion switches with provision for RS232C and also using IR / RF remote Control.  Up to 1080p (HDTV) or 1920x1200 (the	1	
3	1 pass-through ster Connectors 3.5 mm screw connector on a 10" DATA INPUT/OUT Standards CAT 6, Connectors 1 fema POWER 125 VAC, 50-60 Hz 240 VAC, 50-60 Hz USB power Power supply Exter Input: 100-240 VAC Output: 12 VDC, 1 Power output USB:  (Make: Extron / C SITC of Switcher panel source select & contact Closure at Resolution range	reo, unbalanced in TRS jack to 3.5 mm 3 pole captive  (25 cm) pigtail  PUT  IIA/EIA T568B le RJ-45 to 1 female RJ-45  z, 12 A max. z, 10 A max.  rnal C, 50-60 Hz A 5 VDC, 2.1 A, 10.5 watts total  restron / AMX / Kramer)  Should be controllable through front tion switches with provision for RS232C and also using IR / RF remote Control.	1	

Date: 23.09.2016

-		
	Data rate: 6.75 Gbps (2.25 Gbps per color) or above Pixel clock: 165 MHz or above	
	TIACI GIOCK. TOO WITE OF ABOVE	
	Standards DVI 1.0, HDMI 1.3, VGA	
	Switching speed: 200 ns.	
	HDTV Compatible & HDCP Compliant.	
	Video Inputs-10 HDMI & 2 computer graphics video on	
	15-pin HD (VGA) connectors.	
	Scaled Outputs-2 HDMI,22 Output Resolutions-Up to	
	WUXGA/1080p,	
	Auto Input Scanning and Switching,	
	Color Sampling-Supports 4:4:4 (RGB and YUV) as well as	
	4:4:2 (YUV) color sampling, Audio Outputs-1 S/PDIF on an RCA connector,	
	1 balanced stereo audio on a terminal block, embedded	
	audio on the HDMI outputs	
	(Make: Kramer / Extron / Crestron)	
4	SITC of Video Wall:	
1	Configuration of Video Wall:- 1 Video Panel.	
	Size of video panel :- 85 inches diagonal	
	Panel Technology :- LED, Full HD	
	Aspect Ratio :- 16:9	
	Video Panel Resolution :- 1920*1080	
	Video Panel Brightness: - 500 cd/m² or more	
	Video Panel Contrast Ratio :- 1400:1 or more	
	Video Panel Dynamic Contrast Ratio :- 10,000:1 or more View Angle (V/H) :- 178/178	
	Video Panel Response Time :- 12 ms or less than 12 ms	
	Video Panel Display Colours :- 12.113 of less than 12.113  Video Panel Display Colours :- 16.7 M or more	
	Life time of Video Panel :- 50,000 hrs or more	
	Orientation of Video Panel :- Landscape	
	Should support HDMI, DVI and VGA interface/input	
	Should have audio output interface	
	Other Peripherals:- Connecting cables, wall mount	
	brackets, RF / IR Remote control with batteries etc.	
	Warranty: - Three Years Onsite Comprehensive Warranty,	
	including Adaptor and all Spares.	
	(Make: LG/Panasonic/Samsung/Sony)	

## **Audio System**

1	SITC of Boundary Layer Microphone with on/off for	21	
	local conference		
	<ul> <li>Should be placed at 2'-3' intervals</li> </ul>		
	<ul> <li>Frequency Response: 50 to 17000 Hz</li> </ul>		
	<ul> <li>Output Impedance: up to 180Ω</li> </ul>		
	<ul> <li>Programmable on/off switch and LED on/off indicator.</li> </ul>		
	• Maximum SPL (1 kHz at 1% THD, 1 kΩ load) 117.0 Db		
	Dynamic Range at 94.0 dB		
	<ul> <li>Power Requirements 11 to 52 Vdc phantom</li> </ul>		
	Surface-mount microphone.		
	<ul> <li>Open circuit sensitivity at 1 kHz,</li> </ul>		
	<ul> <li>Cardioid Cartridge: -27.5dBV/pa (42.2mV)</li> </ul>		
	Electret Condenser type Programmable on/off switch		
	and LED on/off indicator.		
	<ul> <li>Three operating modes: touch-on/touch-off, press to</li> </ul>		
	talk, and press to mute.		
	<ul> <li>Should be functional during local meeting as well as</li> </ul>		
	video conference.		
	(Make: SHURE/AKG/Beyerdynamic/Audiotechnica)		



2	SITC of Chairman (19 inch.) Gooseneck Microphone	2	 
_	and stand with on/off Base		
	Frequency Response : 50 to 17000 Hz		
	<ul> <li>Output Impedance : up to 180Ω</li> </ul>		
	Signal to noise ratio at 94 dB SPL Cardioid		
	Open circuit sensitivity at 1 kHz, ref. 1V/Pascal–35.0		
	dB (17.8 mV)		
	<ul> <li>Maximum SPL (1 kHz at 1% THD, 1 kΩ load) 124.2dB</li> </ul>		
	Maximum Equivalent output noise : 28.0 dB		
	<ul> <li>Dynamic Range at 1 kΩ Load 96.2 dB</li> </ul>		
	Power Requirements 11 to 52 Vdc phantom, 2.0 mA		
	Should be functional during local meeting as well as		
	video conference.		
	Make: HURE/AKG/Beyerdynamic/Audiotechnica		
3	SITC of Digital Signal Processor for 23 microphones:	1 to 3	
	Multi Channel Microphone input	depe	
	Two Aux-level input	nding	
	LED indication	upon	
	Front-panel headphones output with level control	the	
	<ul> <li>Frequency Response 50 Hz to 20000Hz (±1 dB)</li> </ul>	no. of	
	Equalization inbuilt Phantom	chan	
	Power up to 48 Vdc	nels	
	Bi-color LED indication of channel activation and	avail	
	clipping	able	
	Control System Compatible	in the DSP	
	<ul> <li>Linking capability up to 400 microphone</li> </ul>	DSF	
	<ul> <li>Mountable in a single 19" rack space via integral rack-</li> </ul>		
	mount		
	<ul> <li>Peak-responding output limiter with selectable</li> </ul>		
	thresholds and LED indicator		
	<ul> <li>Logic Operation should be available</li> </ul>		
	(Make: BSS / Shure / Biamp)		
4	SITC of Ceiling speaker	6	
	System		
	<ul> <li>Freq. Range (-10 dB)1: 80 Hz - 20 kHz</li> </ul>		
	Power Capacity2: 80 Watts Continuous Program Power		
	40 Watts Continuous Pink Noise		
	<ul> <li>Nominal Sensitivity3: 86 dB SPL @ 1 m (3.3 ft)</li> </ul>		
	<ul> <li>Nominal Coverage Angle4: 130° conical coverage</li> </ul>		
	<ul> <li>Directivity Factor (Q): 2.4 averaged 500 Hz to 4 kHz</li> </ul>		
	<ul> <li>Directivity Index (DI): 3.8 averaged 500 Hz to 4 kHz</li> </ul>		
	<ul> <li>Rated Maximum SPL: 102 dB @ 1 m (3.3 ft)</li> </ul>		
	<ul> <li>Nominal Impedance: 16 ohms (Min Z 16.1 ? @ 320 Hz)</li> </ul>		
	<ul> <li>Transformer Taps: 070V: 30W, 15W, 7.5W &amp; 3.7W</li> </ul>		
	taps		
	• 100V: 30W, 15W, & 7.5W taps		
	Transducers:		
	Low-Frequency: 100 mm (4.0 in) Polypropylene-		
	coated,		
	1" coil on aluminum former		
	High-Frequency: 19 mm (0.75 in) Titanium coated		
	polyester		
	(Make: JBL / Bose / Extron)		

5	SITC of Amplifier	1		
	<ul> <li>Amplifier: 75 watts x 8 channel amplifier@ 8 ohm ,</li> <li>Sensitivity-1.4 V,</li> </ul>			
	<ul> <li>Sensitivity-1.4 v,</li> <li>Signal to Noise Ratio-110 dB,</li> </ul>			
	<ul> <li>Signal to Noise Ratio-110 dB,</li> <li>THD (full rated power, 20 Hz - 20 kHz)-&lt; 0.05%,</li> </ul>			
	<ul> <li>Frequency Response (at 1W, 4/8 ohms)-+/- 0.5 dB,</li> </ul>			
	<ul> <li>Voltage Gain-25 dB</li> </ul>			
	<ul> <li>Voltage Gain 23 dB</li> <li>Speaker output 8Ω ,70V/100V</li> </ul>			
	Built-in band-pass filter (80Hz to 16kHz)			
	Mountable Desktop & 19" rack.			
	Make- Harman / BOSE / Extron			
6	SITC of AV Recorder:	1		
	<ul> <li>Should Capture HD footage,</li> </ul>	•		
	Pause & resume recording facility should be available			
	Recording through USB & HDD,			
	Storage: 2TB HDD (Internal/External)			
	<ul> <li>Input: HDMI, Component video &amp; audio L/R, 3.5 Audio,</li> </ul>			
	Microphone,			
	Output: HDMI, Headphone, 3,5mm audio,			
	19" Rack mountable,			
	<ul> <li>Data Transfer through USB to Computer,</li> </ul>			
	Power on auto play,			
	(Make- DENON / AVERMEDIA / PANASONIC)			
7	SITC of Speaker cable	100		
	<ul> <li>2 core of high quality with minimum data loss,</li> </ul>	Mtrs.		
	<ul> <li>1.13mm, AWG-16.foil-shielded, twisted-pair,</li> </ul>			
	<ul> <li>Capacitance: 8.5 pF (per foot at a frequency of 10 kHz)</li> </ul>			
	Conductor Stranded bare copper,			
	<ul> <li>Insulation PVC.</li> </ul>			
	Make: AMX / Kramer / Extron			
8	SITC of Microphone Cable	275		
	<ul> <li>High quality with minimum data loss,</li> </ul>	Mtrs		
	• 0.4mm, AWG-20, ruggedness, flexibility, flex life and			
	interference immunity.			
	<ul> <li>Low impedance,</li> </ul>			
	<ul> <li>Operating Temperature Range:-30°C To +60°C,</li> </ul>			
	Overall Nominal Diameter:5mm			
	Make: AMX / Kramer / Extron			
9	SITC of Equipment Rack	1		
	With lockable rear and front glass door, power strip,			
	castor wheel for easy movement.			
	Large cable entry in bottom  Crowndian and handing studies to discharge in hand.			
	Grounding and bonding stud installed in base.    Grounding and bonding stud installed in base.   Grounding and formall the students and formall the students are students.   Grounding and formall the students are students.   Grounding and formall the students are students.   Grounding and bonding students   Grounding and bon			
	Finish in a durable textured powder coat for all the above guide main systems.			
	above audio main systems. (Make- EXTRON / Valrack / President)			
10	Bulk Connectors for complete systems (Audio, Video	1 Lot		
'0	projection etc.),	1 200		
	HDMI Cable 15 Mtr,			
	HDMI Cable 3 Mtrs,			
	VGA patch cord			
	Length: as per site requirements			
	(Make: Kramer/Extron/AMX/Falcon)			
	,		l	



Date: 23.09.2016

Note: Offered specification should be specifically mentioned wherever required.

### List of deviations from the required specifications:

1)

2)

(If left blank, it is treated that there are no deviations in the compliance of specifications)

We offer a warranty period of three years for the video wall panel and one year for all other equipments from the date of installation of the equipments.

We agree for quote validity of 90 days.

We agree for insuring the equipments covering storage cum erection risk for a period of three months from the date of delivery at the destination.

We enclose the technical brochures for the model quoted.

We submit that we shall abide by your terms and conditions governing the quotations and Warranty mentioned in your letter. We submit that we abide by the details given above.

We undertake, if our quotation is accepted, to complete the services in accordance with the delivery schedule specified in the quote.

If our quotation is accepted, we will obtain the guarantee of a bank for a sum equivalent to 10% of the total project cost for the due performance of the Contract, in the form prescribed by the Bank.

We undertake that, in competing for (and, if the award is made to us, in executing) the above project, we will strictly observe the laws against fraud and corruption in force in India.

We understand that you are not bound to accept the lowest or any quotation you may receive.

We confirm that we comply with the eligibility criteria of the bid document and we are submitting the following documentary evidences to establish the compliance:

No.	Document To be submitted	Bidder to provide Details of the document
1	Copy of certificate of Incorporation or Registration Certificate.	
	Copy of Purchase Order received from any client before 01.09.2011 or certificate from the client stating 5 years experience.	
2	Copies of Audited balance sheets for the financial years 2013-14,2014-15 and 2015-16	
3	Copies of Purchase order received from any banks/Financial Institutions/Government Offices during the period 01.09.2015 to 31.08.2016 and the supply certificate issued by the same client.	
4	Details of Registration of the support centre in Delhi.	
5	Manufacturer's authorization letter in the enclosed format (Annexure VII).	



Date: 23.09.201	16 —
Dated this day of 2016	
Signature of Authorised Person (In the Capacity of)	uly
Mobile No: Email Address:	



Date:	23.	09.	20	16
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## **Annexure II**

### Part II (Commercial Quote)

To Date:

Assistant General Manager Indian Bank Zonal office,UGF, World trade centre New delhi

Sub: Supply, installation and Maintenance of Video Conferencing Equipments.

Reference: Tender No. IB/ND/VC/2/2016-17 Dated 23.09.2016

Referring to your above letter calling for quotations, we submit hereunder the price bid for supply, installation and maintenance of Video Conference equipments for the specifications given in Part-I.

### I. VIDEO SYSTEM

SI. No		Description	Qty	Rate / Unit (Taxes Extra)	Total Amount (Taxes Extra)
1	Supply, Installation, Testing & Commissioning (SITC) of Video Conferencing Main Systems			,	,
	No. of sites	Min. 3 sites using in-built multi-site endpoint feature with each site at 720p resolution			
	Camera	Camera with 1/3" CMOS/CCD with Capability for capturing video in poorly lit rooms. Camera mount to be provided.			
	Output Pixels (H x V)	1920 x 1080			
	Frame Rate	Minimum 60 fps			
	Zoom	12X optical zoom with 12X digital zoom			
	Horizontal Viewing Angle	Minimum 65°			
	Pan/Tilt Angle	Pan ±90°/Tilt+/-15°			
	Preset Position	Minimum 25 positions			
	Other features	<ul> <li>It should be able to register on the existing Gate Keeper available at Indian Bank's Head Quarter Chennai &amp; Seamlessly work with the existing infrastructure setup at Bank (Polycom CMA 4000).</li> <li>The PTZ camera and codec should be of same manufacturer.</li> <li>It shall be possible to see both the near and far site on one Screen thus making most efficient use of a single display area.</li> <li>In-built DSP to eliminate feedback and echo.</li> <li>The unit should be capable of</li> </ul>			



Video Quality	supporting other video features like content sharing through direct physical link with the system or via LAN.  Full function IR / RF Remote Control with batteries  Brief details on the VC recording facility and its setup shall be provided.  Full HD (1080p)	
Video Standards	` ',	
	H.263, H.263+, H.263++, H.264 Baseline Profile, H.264 High Profile, MPEG-4 SP@L3 (SIP only) H.460.18, H.460.19 Firewall Traversal	
Audio Standards	G.711, G.722,G.722.1 Mono (11kHz@64/96kbps), MPEG-4 AAC-LC Mono (22kHz@96kbps).	
Screen layout	Screen Layout Full Screen / PinP / PandP / PandPandP / Side by Side	
Network Protocol	TCP/IP, UDP/IP, DHCP, DNS, HTTP, TELNET, SSH, SNMP, NTP, ARP, RTP/RTCP, PPPoE, UPnP, Protocol Stack IPv4, IPv6,Bit Rate 64 kbps to 4,096 kbps,	
H.239	YES 1080 / SXGA / WXGA / 720 /	
Presentation	XGA @30fps,	
Video Input/output	The unit should have minimum 2 video inputs first to HD camera, and Content (DVI-I or equivalent) and At least 2 No. of HDMI/DVI outputs to connecting to high definition display devices and recording devices.	
Other	• VGA	
connectors	• S Component (videos) • 15 pin d-connectors (Camera to VC Processor) • USB 3.0	
Audio	Input:	
Input/output	Microphone Input (quoted system should support up to 4 mics)  2 X Mics (VC omnidirectional HD MICS) should be provided  1 PC Audio /Aux port  Output:  1 x stereo output (RCA) and	
	1 HDMi output	
Other audio features to be supported	Echo Cancellation     Automatic gain control     Automatic noise suppression     Adaptive post filtering	

	Bandwidth / IP	H.323/SIP up to 6 Mbps point to	1		
	Features	point			
	1 3 3 3 3 3	• Support H.320 up 2 Mbps through			
		, ,, , , ,			
		gate keeper.			
		Packet Loss Recovery feature on			
		H.323 call			
		SIP up to 4 Mbps in addition to			
		H323 protocol.			
		• Calls can be made on SIP or H323			
		without having to restart or			
		reconfigure the endpoint.			
	Network	Gigabit Ethernet (10BASE-			
	Interface	T/100BASE-TX/1000BASE-T, IPv6			
		compatible) – 1 No.			
	lla an luta da a a				
	User Interface:	The system should support			
		Password protected system			
		menu.			
		Directory Services.			
		Web-based System			
		Management- SNMP V3 support.			
	Make	Make: SONY/POLYCOM/AVER			
		/CISCO/Panasonic			
2	SITC of Hydraulic	Pop Up Box on Conference Table:	7		
	or of tryandant	י של של של היים היים ליים וליים ליים ליים ליים ליים ליים	'		
	VIDEO INDUT/OUT	DUT			
	VIDEO INPUT/OUT				
	1 pass-through VGA				
	1 pass-through HDN	ЛΙ			
	Connectors 15-pin l	HD female to 15-pin HD female on a 6"			
	(15 cm)	,			
	pigtail				
		MI formale on a 40" (OF are) mistail			
	HDMI female to HDMI female on a 10" (25 cm) pigtail				
	AUDIO INPUT/OUTPUT				
	1 pass-through stereo, unbalanced				
	Connectors 3.5 mm TRS jack to 3.5 mm 3 pole captive				
	screw	, , ,			
	connector on a 10"	(25 cm) nigtail			
	DATA INPUT/OUT				
	Standards CAT 6, T				
	Connectors 1 femal	e RJ-45 to 1 female RJ-45			
	POWER				
	125 VAC, 50-60 Hz	, 12 A max.			
	240 VAC, 50-60 Hz				
		, 10 / CHIAN			
	USB power	1			
	Power supply Exteri				
	Input: 100-240 VAC				
	Output: 12 VDC, 1 A	4			
		5 VDC, 2.1 A, 10.5 watts total			
		-, , , , , , , , , , , , , , , , , , ,			
	(Make: Evtron / Cr	restron / AMX / Kramer)			
3		Should be controllable through front	1		
		ion switches with provision for RS232C			
	& contact Closure a	nd also using IR / RF remote Control.			
	Resolution range 1	Jp to 1080p (HDTV) or 1920x1200 (the			
		f the single-link DVI standard) @ 60 Hz			
	mynest resolution 0	i ilie siligie-iliik DVI stalidald) @ 00 HZ			
	D	(0.05.0)			
		os (2.25 Gbps per color) or above			
	Pixel clock: 165 MH	z or above			
	Standards DVI 1.0,	HDMI 1.3. VGA			
	Switching speed: 20				
	2 mily opood. 20		1	l .	1



Date: 23.09.2016

	HDTV Compatible & HDCP Compliant.	
	Video Inputs-10 HDMI & 2 computer graphics video on	
	15-pin HD (VGA) connectors.	
	Scaled Outputs-2 HDMI,22 Output Resolutions-Up to	
	WUXGA/1080p,	
	Auto Input Scanning and Switching,	
	Color Sampling-Supports 4:4:4 (RGB and YUV) as well as	
	4:4:2 (YUV) color sampling,	
	Audio Outputs-1 S/PDIF on an RCA connector,	
	1 balanced stereo audio on a terminal block, embedded	
	audio on the HDMI outputs	
	(Make: Kramer / Extron / Crestron)	
4	SITC of Video Wall:	
	Configuration of Video Wall:- 1 Video Panel.	
	Size of video panel :- 85 inches diagonal	
	Panel Technology :- LED, Full HD	
	Aspect Ratio :- 16:9	
	Video Panel Resolution :- 1920*1080	
	Video Panel Brightness :- 500 cd/m² or more	
	Video Panel Contrast Ratio :- 1400:1 or more	
	Video Panel Dynamic Contrast Ratio :- 10,000:1 or more	
	View Angle (V/H): - 178/178	
	Video Panel Response Time: - 12 ms or less than 12 ms	
	Video Panel Display Colours :- 16.7 M or more Life time of Video Panel :- 50,000 hrs or more	
	Orientation of Video Panel :- Landscape	
	Should support HDMI, DVI and VGA interface/input	
	Should have audio output interface	
	Other Peripherals:- Connecting cables, wall mount	
	brackets, RF / IR Remote control with batteries etc.	
	Warranty: - Three Years Onsite Comprehensive Warranty,	
	including Adaptor and all Spares.	
	(Make: LG/Panasonic/Samsung/Sony)	
	,	<u> </u>

## II. Audio System

SI.	Description	Qty	Rate / Unit	Total Amount
No			(Taxes Extra)	(Taxes Extra)
1	SITC of Boundary Layer Microphone with on/off for	21		
	local conference			
	<ul> <li>Should be placed at 2'-3' intervals</li> </ul>			
	<ul> <li>Frequency Response: 50 to 17000 Hz</li> </ul>			
	<ul> <li>Output Impedance: up to 180Ω</li> </ul>			
	<ul> <li>Programmable on/off switch and LED on/off indicator.</li> </ul>			
	<ul> <li>Maximum SPL (1 kHz at 1% THD, 1 kΩ load) 117.0 Db</li> </ul>			
	Dynamic Range at 94.0 dB			
	<ul> <li>Power Requirements 11 to 52 Vdc phantom</li> </ul>			
	Surface-mount microphone.			
	<ul> <li>Open circuit sensitivity at 1 kHz,</li> </ul>			
	<ul> <li>Cardioid Cartridge: -27.5dBV/pa (42.2mV)</li> </ul>			
	Electret Condenser type Programmable on/off switch			
	and LED on/off indicator.			
	Three operating modes: touch-on/touch-off, press to			
	talk, and press to mute.			
	Should be functional during local meeting as well as			
	video conference.			
	(Make: SHURE/AKG/Beverdynamic/Audiotechnica)			



2	SITC of Chairman (19 inch.) Gooseneck Microphone	2	
_	and stand with on/off Base	_	
	Frequency Response : 50 to 17000 Hz		
	<ul> <li>Output Impedance : up to 180Ω</li> </ul>		
	Signal to noise ratio at 94 dB SPL Cardioid		
	<ul> <li>Open circuit sensitivity at 1 kHz, ref. 1V/Pascal–35.0</li> </ul>		
	dB (17.8 mV)		
	<ul> <li>Maximum SPL (1 kHz at 1% THD, 1 kΩ load) 124.2dB</li> </ul>		
	Maximum Griz (1 kriz at 17/6 111B, 1 ksz lodd) 124.2dB     Maximum Equivalent output noise : 28.0 dB		
	D ' D ' (4101 1000 ID		
	<ul> <li>Dynamic Range at 1 kΩ Load 96.2 dB</li> <li>Power Requirements 11 to 52 Vdc phantom, 2.0 mA</li> </ul>		
	Olive III be for a Consell II does be call a conference on the conference of the con		
	Should be functional during local meeting as well as video conference.		
	Make: HURE/AKG/Beyerdynamic/Audiotechnica		
3	SITC of Digital Signal Processor for 23 microphones:	1 to 3	
3	Multi Channel Microphone input	depe	
	·	nding	
	Two Aux-level input	upon	
	LED indication	the	
	Front-panel headphones output with level control	no. of	
	Frequency Response 50 Hz to 20000Hz (±1 dB)	chan	
	Equalization inbuilt Phantom	nels	
	<ul> <li>Power up to 48 Vdc</li> </ul>	avail	
	<ul> <li>Bi-color LED indication of channel activation and</li> </ul>	able	
	clipping	in the	
	<ul> <li>Control System Compatible</li> </ul>	DSP	
	<ul> <li>Linking capability up to 400 microphone</li> </ul>	ВО.	
	<ul> <li>Mountable in a single 19" rack space via integral rack-</li> </ul>		
	mount		
	<ul> <li>Peak-responding output limiter with selectable</li> </ul>		
	thresholds and LED indicator		
	<ul> <li>Logic Operation should be available</li> </ul>		
	(Make: BSS / Shure / Biamp)		
4	SITC of Ceiling speaker	6	
	System		
	<ul> <li>Freq. Range (-10 dB)1: 80 Hz - 20 kHz</li> </ul>		
	<ul> <li>Power Capacity2: 80 Watts Continuous Program Power</li> </ul>		
	<ul> <li>40 Watts Continuous Pink Noise</li> </ul>		
	<ul> <li>Nominal Sensitivity3: 86 dB SPL @ 1 m (3.3 ft)</li> </ul>		
	<ul> <li>Nominal Coverage Angle4: 130° conical coverage</li> </ul>		
	<ul> <li>Directivity Factor (Q): 2.4 averaged 500 Hz to 4 kHz</li> </ul>		
	<ul> <li>Directivity Index (DI): 3.8 averaged 500 Hz to 4 kHz</li> </ul>		
	<ul> <li>Rated Maximum SPL: 102 dB @ 1 m (3.3 ft)</li> </ul>		
	<ul> <li>Nominal Impedance: 16 ohms (Min Z 16.1 ? @ 320 Hz)</li> </ul>		
	<ul> <li>Transformer Taps: 070V: 30W, 15W, 7.5W &amp; 3.7W</li> </ul>		
	taps		
	• 100V: 30W, 15W, & 7.5W taps		
	Transducers:		
	<ul> <li>Low-Frequency: 100 mm (4.0 in) Polypropylene-</li> </ul>		
	coated,		
	1" coil on aluminum former		
	High-Frequency: 19 mm (0.75 in) Titanium coated		
	polyester		
	(Make: JBL / Bose / Extron)		
	Imane. ADE I DOSE I EXHAII)		

5	<ul> <li>SITC of Amplifier</li> <li>Amplifier: 75 watts x 8 channel amplifier@ 8 ohm ,</li> <li>Sensitivity-1.4 V,</li> <li>Signal to Noise Ratio-110 dB,</li> <li>THD (full rated power, 20 Hz - 20 kHz)-&lt; 0.05%,</li> <li>Frequency Response (at 1W, 4/8 ohms)-+/- 0.5 dB,</li> <li>Voltage Gain-25 dB</li> </ul>	1	
	<ul> <li>Speaker output 8Ω,70V/100V</li> <li>Built-in band-pass filter (80Hz to 16kHz)</li> <li>Mountable Desktop &amp; 19" rack.</li> <li>Make- Harman / BOSE / Extron</li> </ul>		
6	<ul> <li>SITC of AV Recorder:</li> <li>Should Capture HD footage,</li> <li>Pause &amp; resume recording facility should be available</li> <li>Recording through USB &amp; HDD,</li> <li>Storage: 2TB HDD (Internal/External)</li> <li>Input: HDMI, Component video &amp; audio L/R, 3.5 Audio, Microphone,</li> <li>Output: HDMI, Headphone, 3,5mm audio,</li> <li>19" Rack mountable,</li> <li>Data Transfer through USB to Computer,</li> <li>Power on auto play,</li> </ul>	1	
	(Make- DENON / AVERMEDIA / PANASONIC)		
7	SITC of Speaker cable	100	
	<ul> <li>2 core of high quality with minimum data loss,</li> <li>1.13mm, AWG-16.foil-shielded, twisted-pair,</li> <li>Capacitance: 8.5 pF (per foot at a frequency of 10 kHz)</li> <li>Conductor Stranded bare copper,</li> <li>Insulation PVC.</li> <li>Make: AMX / Kramer / Extron</li> </ul>	Mtrs.	
8	SITC of Microphone Cable	275	
	<ul> <li>High quality with minimum data loss,</li> <li>0.4mm, AWG-20, ruggedness, flexibility, flex life and interference immunity.</li> <li>Low impedance,</li> <li>Operating Temperature Range:-30°C To +60°C,</li> <li>Overall Nominal Diameter:5mm</li> <li>Make: AMX / Kramer / Extron</li> </ul>	Mtrs	
9	SITC of Equipment Rack	1	
	<ul> <li>With lockable rear and front glass door, power strip, castor wheel for easy movement.</li> <li>Large cable entry in bottom</li> <li>Grounding and bonding stud installed in base.</li> <li>Finish in a durable textured powder coat for all the above audio main systems.</li> <li>(Make- EXTRON / Valrack / President)</li> </ul>	·	
10	<ul> <li>Bulk Connectors for complete systems (Audio, Video projection etc.),</li> <li>HDMI Cable 15 Mtr,</li> <li>HDMI Cable 3 Mtrs,</li> <li>VGA patch cord</li> <li>Length: as per site requirements</li> <li>(Make: Kramer/Extron/AMX/Falcon)</li> </ul>	1 Lot	



Date: 23.09.2016

### **III. Annual Maintenance Charges**

S. No.	Item Description	Annual Maintenance Charges for 2 <sup>nd</sup> , 3 <sup>rd,</sup> 4 <sup>th</sup> and 5 <sup>th</sup> years in Rupees # (Taxes Extra)				
		(AMC for video wall should be considered for 4 <sup>th</sup> & 5 <sup>th</sup> years)				
		2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year	
	Entire Video Conference System as detailed in the technical bid					
	Total AMC for 4 years (including 2 years AMC for video wall)					

#### **SUMMARY**

S. No	Description	Amount in Rupees (Taxes Extra)
1	Total Cost of Video Equipments with 1 year warranty (As per Total of item I)	
2	Total Cost of Audio Equipments with 1 year warranty (As per Total of item II)	
3	Total AMC Charges (As per Total of item III)	
	Grand Total (Total of S.No.1, 2 & 3)	

- **# Note:** 1. Price to include all duties, levies, freight, insurance, warranty, AMC etc but exclusive of VAT/CST, octroi/entry tax. Octroi or entry tax, if applicable, shall be reimbursed at actuals, against proof of payment in original.
  - 2.Bidder should ensure to have visited the site and understood the scope of work before quoting rates. No claims will be entertained by Bank beyond the quoted amount for any additional work necessitated for commissioning of the system.
  - 3.In case of discrepancy between unit price and total price, the unit price shall prevail.

We submit that we will abide by the details given above and the conditions given in your above Bid document.

Place:		
Date:		
	Signature of Authorised Person	
	Name	
	Business address	



Date:	23.0	9.20	16
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### **ANNEXURE - III**

## **PERFORMANCE SECURITY FORMAT**

Bank Guarantee No.	Date	:
To: INDIAN BANK, New Delhi, INDIA:		
"the supplier") has undertaken, in pu		l, to
	by you in the said Contract that the supplier so Bank for the sum specified therein as security ons in accordance with the Contract.	
AND WHEREAS we have agreed to give	the supplier a Guarantee:	
supplier, up to a total of	e are Guarantors and responsible to you, or	Amount of the vritten demand ent, any sum or d, without your
Signature and Seal	of Guarantors	
Date		
NOTE :		

- 1. Vendors should ensure that seal and code no. of the signatory is put by the bankers, before submission of the bank guarantees.
- 2. Bank guarantees issued by banks located in India shall be on a Non-Judicial Stamp Paper of requisite value



Date:	23.0	9.20	16
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## **ANNEXURE - IV**

### **CONTRACT FORM**

			201111124	<u> </u>			
(hereina of part: WHERE viz., by the S (Contract NOW TI	AS the Pu upplier fo at Price in	T made theday of Purchaser") of the one particle of the supply of those good words and Figures) (he of the one	art and Supplier) or certain cription o ods and s creinafter AS FOLI	(hereinafter n Goods and a f Goods and services in the called "the	. (Name of Super called "the S	oplier) upplier") of the ces has accepted a").	quote
as 2. Th Ag	assigned to them in the Conditions of Contract referred to.					•	
(b (c) (d (e	<ul> <li>(a) the Bid Form and the Price Schedule submitted by the Bidder;</li> <li>(b) the Schedule of Requirements;</li> <li>(c) the Technical Specifications;</li> <li>(d) the Conditions of Contract;</li> <li>(e) the Purchaser's Notification of Award.</li> </ul>					nafter	
me se Co	In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract.				d of the		
go as pro Brief par	4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.Brief particulars of the goods and services which shall be supplied / provided by the Supplier are as						
under:							
	SL. NO.	BRIEF DESCRIPTION OF GOODS & SERVICES	QUANT SUPPLI	ITY TO BE	UNIT PRICE	TOTAL PRICE	
TOTAL '	VALUE:						
DELIVE	DELIVERY SCHEDULE:						
	<b>IN WITNESS</b> whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.						
		nd Delivered by the (For I	ndian		led and Delive	red by the (For the	2
in the pr	esence of	:.		in the prese	nce of:		



Date:	23.09	.2016
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### **ANNEXURE - V**

#### **BID SECURITY FORM**

Whereas	(Hereinafter	called	"the	Bidder")	has	submitted	its	quote
dated (date o	f submission of	quote) fo	or the	supply of				(name
and/or description of the good	ds) (Hereinafte	r called "t	he Qu	ıote").				
KNOW ALL PEOPLE by these p	presents that W	E		(name o	f bank)	of		(name
of country), having our regist	tered office at .		(a	ddress of	bank)	(hereinafte	r calle	ed "the
Bank"), are bound unto India	an Bank in the	sum of _	_			for whi	ch pa	yment
well and truly to be made to	the said Purchas	ser, the B	ank b	inds itself,	its suc	cessors, and	d assi	gns by
these presents. Sealed with t	the Common Se	al of the	said B	ank this	dav	of ·		

### THE CONDITIONS of this obligation are:

- 1. If the Bidder
  - (a) withdraws its Quote during the period of bid validity specified by the Bidder in the tender document; or
  - (b) does not accept the correction of errors in accordance with the Instructions to Bidders; or
- 2. If the Bidder, having been notified of the acceptance of its quote by the Purchaser during the period of bid validity:
  - (a) fails or refuses to execute the Contract Form if required; or
  - (b) fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including forty five (45) days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the Bank)

- **NOTE:** 1. SUPPLIER should ensure that the seal and CODE No. of the signatory is put by the bankers, before submission of the bank guarantee.
- 2. Bank Guarantee issued by banks located in India shall be on a Non-Judicial Stamp Paper of requisite value.



Date: 23.09.2016

**ANNEXURE - VI** 

# PROFORMA OF INSTALLATION CERTIFICATE FOR ISSUE BY THE OFFICES AFTER SUCCESSFUL COMMISSIONING OF EQUIPMENT

Sub:	Date : Certificate of commissioning of equipment
1.	This is to certify that the equipment as detailed below has/have been received in good condition along with all the standard and special accessories (subject to remarks in Para No. 2) and a set of spares in accordance with the Contract/Specifications. The same has been installed and commissioned.
	(a) Contract No dated  (b) Description of the equipment  (c) Quantity  (d) Date of delivery  (e) Date of commissioning and proving test
2.	Details of accessories/spares not yet supplied and recoveries to be made on that account:  S.No. Description Amount to be recovered
<ul><li>3.</li><li>4.</li></ul>	The proving test has been done to our entire satisfaction and operators have been trained as per contract terms  The supplier has fulfilled its contractual obligations satisfactorily* or  The supplier has failed to fulfil its contractual obligations with regard to the following:  (a)
	(b)
	Signature
	Name
	Designation with stamp

- \* Explanatory notes for filling up the certificates:
- (a) They have adhered to the time schedule specified in the contract in despatching the documents/drawings pursuant to Technical Specifications.
- (b) They have supervised the commissioning of the equipment in time i.e. within the period specified in the contract from the date of intimation by the Purchaser in respect of the installation of the system.
- (c) In the event of documents/drawings having not been supplied or installation and commissioning of the equipment have been delayed on account of the supplier, the extent of delay should always be mentioned.



Date:	23.0	09.	20	16
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### **ANNEXURE - VII**

person competent.

### **Manufacturer's Authorization Form**

No	Dated
То	
Assistant General Ma Indian Bank Zonal Office, New Delhi.	anager
Dear Sir:	
]	Tender Ref. No.
	who are established and reputable manufacturers of
	(name & descriptions of products offered) having production facilities
at	_ (address of production unit) do hereby authorize M/s
(Name and address	of Agent) to submit a quote, and subsequently negotiate and sign the contract
with you against the	tender Ref. No: for the product manufactured by us.
We hereby extend o	ur full warranty for the product offered for supply by the above firm against this
RFP and duly autho	rise said firm to act on our behalf in fulfilling all installation, technical support
and maintenance ob	ligations required by the Contract.
	Yours faithfully,
	(Name)

Note: This letter of authority should be on the letterhead of the OEM and should be signed by a