



**ICAR - CENTRAL INSTITUTE FOR WOMEN IN AGRICULTURE**  
**Bhagyashri Road, Kalinga Studio Chowk, Bhubaneswar - 751003, Odisha**

**CORRIGENDUM TO GEM BID GEM/2024/B/5353956**

Custom Bid for Procurement, Installation, Establishment & Commissioning of  
Audio Visual System/Video Conferencing System on turnkey basis

(Prospective bidders shall comply with the following terms & conditions while quoting for the items  
to be procured)

(This Tender Enquiry Document will supersede the Terms & Conditions of the GeM portal)

## INTRODUCTION

ICAR-Central Institute for Women in Agriculture (ICAR-CIWA) is an institution first of its kind in India that is exclusively devoted to gender related research in agriculture. Established as National Research Centre for Women in Agriculture (NRCWA) in April 1996 at Bhubaneswar (Odisha) under Indian Council of Agricultural Research, New Delhi, following the recommendation of the Working Group on Agricultural Research and Education, constituted by the Planning Commission for the formulation of the 8th Five Year Plan (1992-97), the institute has been undertaking research on various issues affecting women's role and participation and the emerging opportunities in agriculture. It focuses on participatory action research in different technology-based thematic areas involving farm women to make farm technologies suitable for them. The Institute also takes up activities to catalyze and facilitate research and development institutions to bring farm women perspective in their research and development programmes. The Directorate has been upgraded and renamed as "ICAR-Central Institute for Women in Agriculture" (ICAR-CIWA) in the year 2014 under XIIth plan EFC.

The importance of such a dedicated institution has grown manifold over the years as gender dynamics in agriculture is poised for a great change, particularly in the context of changing socio-economic, institutional, policy and natural environment. Women in India are subject to varied forms of inequality that reduce the pace of their progress. Therefore, better understanding of women's involvement in agriculture is also a pre-requisite for planning and promoting gender responsive actions to achieve the twin objectives of women empowerment and sustainable agricultural growth. Given the fact that agriculture is less attractive economic vocation for many men and women, it becomes more important to find ways and means for increasing the productivity of workers, more importantly the women workers, in agriculture as there will be continuous rise in participation of women in agriculture and allied tasks in future.

ICAR-CIWA vide this tender enquiry invites Tenders from the reputed/experienced Suppliers / Dealers for Video Conferencing System with Peripherals at ICAR-CIWA Campus, Bhagyashri Road, Kalinga Studio Chowk, Mouza-Jokalandi, Bhubaneswar – 751003. The bidders are requested to submit the Tenders online on GeM Portal only.

The details of Tender submission online is as follows:

Sl.No.	Description	Date and Time
1)	Tender Publishing Date	As notified in GeM portal
2)	Bid Closing date	As notified in GeM portal

The tender document and this corrigendum consists of supply and installation of audio visual setup with video conferencing for conducting training/conference/seminar. Tender document along with this corrigendum can be downloaded from the website of GeM Portal and ICAR-CIWA website. **THE TENDER HAS TO BE SUBMITTED ONLINE THROUGH GEM PORTAL ONLY.**

The Director, ICAR-CIWA reserves the right to reject any tender without assigning any reason thereof. A brief detail of tender is given below along with terms and conditions.

## **GENERAL TERMS AND CONDITIONS:**

1. Online bids on GeM are invited for and on behalf of the Director, ICAR-CIWA, from eligible bidders for Supply, installation, commissioning, testing and training of audio visual setup with video conferencing system under ICAR-CIWA Campus, Bhagyashri Road, Kalinga Studio Chowk, Mouza-Jokalandi, Bhubaneswar – 751003, Odisha.
2. All communications must be addressed to the Director, ICAR-CIWA, Bhagyashri Road, Kalinga Studio Chowk, Mouza-Jokalandi, Bhubaneswar – 751003, Odisha
3. **Scope of supply/work:** The detailed specification of the supply, installation commissioning, testing and training of audio visual setup with video conferencing system is provided in **Annexure – I** of this corrigendum to the tender document. These specifications, shall supersede the specifications mentioned in the original GeM bid document.
4. **Eligibility Criteria:** Completely filled and submission of all documents as per Checklist (**Annexure – II**)
5. Bidder has to submit the Technical Compliance Matrix (**Table-I of Annexure – I**) and Product Brochure of the offered solution.
6. The bidder company should have positive net worth at least for last three financial years ending on 31 March 2024.
7. The bidder should be a profit-making organization for at least three years during the last five years ending on 31 March 2024
8. The bidder should have the latest ISO 9001, 14001, 27001.
9. Bidder and OEM must not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Govt. of India/ State Govt. /PUS.
10. Consortiums/JV bidding is not allowed.
11. The bidder should be an OEM/Partner/Authorized reseller of the OEM. The bidder should submit a Manufacturer’s Authorization Form (MAF) from OEM for supplied items. In case, the bidder is an OEM, a self-Declaration on their letterhead that the bidder is OEM is required to be submitted by the bidder.
12. In case of imported products, OEM should have a registered office in India to provide after-sales service support in India from last at least 3 years. **The certificate to this effect should be submitted.**
13. **Escalation Matrix for Service Support:** Bidder/ OEM must provide an Escalation Matrix of Telephone Numbers for Service Support.
14. Bidder must have a Dedicated/Toll-free Telephone No. for Service Support.
15. **Security Deposit:** The successful bidder has to furnish Performance Security Deposit @ 3% on the total amount quoted which will be refunded / returned only after satisfactory completion of the contractual obligation.
16. **Delivery Schedule:** After awarding of supply order, the vendor is bound to Supply, installation and commissioning of video conferencing system with peripherals as per the discount quoted within 15 days else the supply order placed shall automatically become null and void.
17. **Liquidated Damages:** In case the supply is not made in the delivery period notified in supply order, Liquidated damages at the rate of 0.5% of the total value of supply order will be deducted up to a maximum of 10% of the total value of order.
18. If after finalization of the tender, the selected firm expresses its inability provide the Supply, installation and commissioning of audio visual set up with video conferencing system at the quoted price, thus failing in fulfilling the stipulated terms and conditions for award of the contract, then the Security Deposit amount is liable to be forfeited in total.

19. **Payment:** The firm is required to submit the GST Bill in along with the supply order. The bill will be processed for payment only after it has been certified by the concerned in-charge at the supply, installation and testing has been done as per the given in the supply order and completed in the Delivery Schedule notified above.
20. **Taxes/Duties:** GST as applicable will be paid.
21. **Rejection of tenders:** Tenders not complying with any one of the above conditions, are liable to be rejected. No correspondence in this regard will be entertained.
22. **Acceptance of tender:** The Director, ICAR-CIWA reserves the right to accept or reject any of the tenders either in part or in full without assigning any reason thereof.
23. **Jurisdiction:** All disputes including court proceedings shall be settled within the Bhubaneswar jurisdiction only.

**SCOPE OF WORK**

The Bidder under the scope of work in this GeM bid is envisaged to design the solution including but not limited to Supply, Installation, and Commissioning of Equipment's/hardware and the software required for the successful Implementation of Video Conferencing System at ICAR-CIWA as per the functional and technical specifications, the scope of work mentioned in this GeM Bid.

Bidder is also responsible for all the components like installation of PTZ Camera, TVs, Microphone with Speaker, Laser Projector with Motorized Screen, Digital Podium, Speakers, Amplifier with Equalizer, Table top Mic, PC, HDMI Cable, switcher and any other devices/accessories like mounting bracket, etc. required for the successful running of envisaging solution. Further the intra-component compatibility should be ensured.

The Bidder is responsible for any other components inadvertently missed out but it is required as per the proposed solution of the bidder and is essential for an overall solution to successfully run. ICAR-CIWA will not be liable for payment of any additional cost outside of financial bid.

The complete scope of work would broadly be: design, engineering, supply, testing, installation, commissioning & warranty support of all project deliverables.

Quoted item is required to be offered with a 3 (Three) year OEM warranty. All equipment including material to be installed by the Bidder shall be new and the product should not be declared end of support for 3 (Three) years. A certificate to that effect should be furnished from OEM on its letter head confirming the same. All equipment shall conform to the codes, standards and regulations applicable and benefit from the usual manufacturer's guarantees. Bidders shall quote the price accordingly for each item considering minimum 3 years warranty support.

**TABLE – I: DETAILED SPECIFICATIONS OF Procurement, Installation, Establishment & Commissioning Of Audio Visual System/Video Conferencing System on Turnkey Basis – Technical Compliance Matrix**

Sr. No	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
1	55" 4K UHD Display	SITC of 55 inch TV Size 3840 X 2160 (UHD) Resolution 4K Display, Backlight Unit Type Direct, Brightness of 400 nits or more, Dynamic Contrast Ratio (Dynamic MCI (Hz)) 1,000,000:1 or More, Static (Panel) Contrast Ratio 1300:1 or more, Refresh Rate 60Hz or more, HDR (10 Pro / HLG technology or better, Speaker (sound output) 10W + 10W or more, Digital (Terrestrial, Cable, Satellite) DVB-T2/C or more, One Channel Map, IP Channel Manager; External Speaker Out (Int Variable/Fixed, 3.5mm, Stereo, Single ended Type (GND,L+,R+), 2W+2W with 80), Smart Home (Launcher Bar), Web Browser Pre-loaded App (YouTube only), SDP Server compatibility, WiFi (Version) (802. 11ac), Screen Share (Miracast), Smart Share, Bluetooth Audio Playback, HDMI-ARC (ARC, HDMI2), Vertical Setup, Fail Over, Play Via URL, NTP Server Setting, CISCO Certi. Compatibility ,Crestron Connected (Network Based Control), DPM (Digital Power management), Time scheduler, RTC (Real Time Clock), NTP sync timer, BEACON, Embedded CM (contents manager), Embedded GM (Group manager). Front & rear Interface of: HDMI In (3 (2.0)),	2		

		Headphone Out (Phone Jack Type), RS-232C (D-Sub 9pin / Phone jack) (Phone Jack, 4pi), USB (2.0), RF In, Digital Audio Out (Optical), External Speaker Out (3.5mm phone jack), RJ45 (Usage Purpose) (LAN) or more. CB, CU TR, CE Certification			
2	43" 4K UHD Display	SITC of 43 inch TV Size 3840 X 2160 (UHD) Resolution 4K Display, Backlight Unit Type Direct, Brightness of 300 nits or more, Dynamic Contrast Ratio (Dynamic MCI (Hz)) 1,000,000:1 or More, Static (Panel) Contrast Ratio 1200:1 or more, Refresh Rate 60Hz or more, Speaker (sound output) 10W + 10W or more, Digital (Terrestrial, Cable, Satellite) DVB-T2/C or more, External Speaker Out (Int Variable/Fixed, 3.5mm, Stereo, Single ended Type(GND,L+,R+), 2W+2W with 80), Smart Home, Web Browser Pre-loaded App (YouTube), SDP Server compatibility, Mood Display, Soft AP, WiFi (Version) (802. 11ac), Screen Share (Miracast), Smart Share, Bluetooth Audio Playback, HDMI-ARC (ARC, HDMI2), Vertical Setup, Fail Over, Play Via URL, NTP Server Setting, CISCO Certi. Compatibility ,Crestron Connected (Network Based Control), DPM (Digital Power management), Time scheduler, RTC (Real Time Clock), NTP sync timer, BEACON, Embedded CM (contents manager), Embedded GM (Group manager). Front & rear Interface of: HDMI In, Headphone Out (Phone Jack Type), RS-232C (D-Sub 9pin / Phone jack) (Phone Jack, 4pi) , USB (2.0), RF In, Digital Audio Out (Optical), External Speaker Out(3.5mm phone jack), RJ45 (Usage Purpose) (LAN)or more. CB, CU TR, CE Certification	2		
3	55" Moveable stand	SITC of 55" Moveable stand shall be Wall / Ceiling Mounting type as per site requirement.	2		
4	43" Floor stand	SITC of Floor stand for 43" Display	2		
5	Laser Projector	SITC Of 5200 ANSI Lumens LCD Projector Systems, PROJECTOR TYPE LCD Projectors Or Better, BRIGHTNESS OF 5200 Lm Or More, WUXGA Resolution Or more, LAMP LIFE 20,000 Hours Or More, LASER LIGHT SOURCE Technology Or More, CONTRAST RATIO Of 30,000,00 :1 Or More, KEYSTONE CORRECTION RANGE Vertical: ±25 °, Horizontal: ±35 ° Or More, The HDMI Interface Shall Support Compatible With HDCP, Deep Colour, 4K/30p6 Signal Input Or More, ZOOM 1.6X Zoom Lens Or More, Interfaces Like : INPUT : HDMI X 2, VGA IN X 2, Video IN X 1, Audio IN X 3 USB Type A X1, RS232 X 1, LAN X 1, HD Base-T X 1, OUTPUT: VGA Out X 1, Audio Out X 1 Or More, LENS 1.6x Manual Zoom of more, Manual Focus Lens, F 1.60–2.12, F 15.30–24.64 Mm Or More, FIXED ZOOM LENS OF THROW RATIO 1.09- 1.77:1 Or More.	1		
6	Projector Stand	SITC of Projector Stand with Ceiling mounting options, Height adjustment of up to 6ft, It shall be supplied with All related hardware's.	1		
7	135" motorized screen	SITC of 135" motorized screen, 16:9 or 16:10 Aspect ratio or more, IR/RF remote control, It shall be supplied with IR/RF Remote, Wall mounting options.	1		
8	3 KVA UPS	SITC of 3KVA UPS Online configuration with double conversion UPS & Zero transfer time. Wide Input voltage range from (110 ~ 300VAC) Auto restart & capability with the Independent battery bank operation of the UPS. UPS should be designed at Rated PF of 0.9 i.e. 3kVA/2.4kW UPS rating. Generator compatibility with cold start and AC start features.	1		

		Automatic bypass to transfer the load on mains due to overload & internal fault. Programable output socket for load segmentation. Input type: Single-Phase / 2-Wire & Gnd (1Phase & Neutral + Ground). Nominal Input Frequency of 50 or 60Hz or more, Input Frequency Range 40 to 70 Hz or more, Input Power Factor > 0.99(@ full load) or more, Generator Compatibility Compatibility to genset supply required, Input Protection Should be provided at the input of the UPS suitable for the full rated capacity of the UPS.			
9	20X camera	<p>SITC of PTZ camera  1/2.8 HD CMOS sensor or better. Option for Auto or Manual White Balance. S/N Ratio of &gt;55db. 20x optical zoom or better. 12x digital zoom or better.</p> <p>USB 3.0 port for unified communication applications, HDMI/DVI Port for Hardware Equipment &amp; IP interface for monitoring. RJ-45 network interface for Monitoring applications.</p> <p>It shall support TCP/IP, HTTP Port &amp; RTSP Port. Support configurable site addressing while streaming with Time stamp. Shall support Dual H.264 and H.265 Streams with Option of Full HD, HD and SD resolution. It shall support Video format on USB as well as HDMI of 1080p 60/50 fps, 1080i 60/50 fps, 1080p 30/25 fps, 720p 60/50/30/25 fps, At least 4 Infra Red Identities. At least one preset shall get recalled whenever camera is powered on. It shall support 60 fps on both USB 3.0 as well as HDMI interface or better. An RS 232C port as well as RS-422/485 Port for Communication. RJ-45 Control port with TCP/IP Controlling.</p> <p>68° or better field of view.  Pan Rotation Angle of -170degrees to +170 degrees or better.  A Tilt Rotation Angle of -30 degrees to + 90 degrees or better.  Supplied with IR remote control, Control Cable, Mounting bracket, Operation Manual, Mounting Screws and Camera Cable as an included accessory.</p>	1		
10	12X camera	<p>SITC of PTZ camera  1/2.7 HD CMOS sensor or better. option of Auto or Manual White Balance. S/N Ratio of &gt;55db.  12x optical zoom or better. 12x digital zoom or better.</p> <p>USB 3.0 port for unified communication applications, HDMI/DVI Port for Hardware Equipment's &amp; IP interface for monitoring.  RJ-45 network interface for Monitoring applications.  Support TCP/IP, HTTP Port &amp; RTSP Port shall be configurable.  Support configurable site addressing while streaming with Time stamp. Support Dual H.264 and H.265 Streams with Option of Full HD, HD and SD resolution. Support Video format on USB as well as HDMI of 1080p 60/50 fps, 1080i 60/50,1080p 30/25,720p 60/50/30/25 fps, at least 4 Infra Red Identities. At least one preset shall get recalled whenever camera is powered on.  It shall support 60 fps on both USB 3.0 as well as HDMI interface or better. RS 232C port as well as RS-422/485 Port for Communication.  RJ-45 Control port with TCP/IP Controlling. At least 100 Position Presets through keyboard or third party controller and at least 9 position presets through IR remote or better.  68° or better field of view.  Pan Rotation Angle of -170degrees to +170 degrees or better.  Tilt Rotation Angle of -30 degrees to + 90 degrees or better.  Supplied with IR remote control, Control Cable, Mounting bracket, Operation Manual, Mounting Screws and Camera Cable as an included accessory</p>	3		

11	Vision Mixer	<p>Video Mixing Unit with UC application with at least 4 HDMI Inputs and 2 HDMI Output. USB type C or 3.0 interface for UC applications. It shall support resolutions of 1080p 60/ 59.94/ 50/ 30/ 29.97/ 25/ 24/ 23.98, 1080i 50/ 59.94/ 60, 720p 60/ 59.94/ 50/ 30/ 29.97/ 25/ 24/ 23.98, 576i 50, 576p 50, 480p 59.94/ 60, 480i 59.94/ 60 on HDMI Input.</p> <p>It shall support resolutions of 1080p 60/ 59.94/ 50/ 48/ 47.95/ 30/ 29.97/ 25/ 24/ 23.98; 1080i 60/ 59.94/ 50 on both HDMI outputs</p> <p>It shall support resolutions of up to 1080p on UC interface.</p> <p>RS-232 or RJ-45 control interface. Control operation through buttons, RJ-45 or USB. It shall support all standard Image format. It shall support following Logo size: 10×10 pixel to 600×600 pixel.</p> <p>Audio Mixing: HDMI ×4 and MIC/ Line level ×2, PIP, POP. It shall support 9x2 or more patterns including, mute, freeze. It shall be supplied with Power Adaptor and USB cable.</p>	2		
12	8x8 HDMI Matrix Switcher	<p>SITC of HDMI matrix switching system</p> <p>8 HDMI 2.0 Inputs with 3.5mm Audio Embedding interface for each input. 8 HDMI 2.0 Outputs with 3.5mm audio de embedding interface for each output.</p> <p>It shall support 480i, 576i, 480p, 576p, 720p, 1080i, 1080p@24/30/50/60Hz, 4K@60Hz or better.</p> <p>1x RS-232 In, 1x RS-232 out and 1x RJ-45 interface.</p> <p>Support controlling through IR remote, front buttons control, RS232, UDP. It shall support LPCM 7.1CH, Dolby TrueHD, Dolby Digital and DTS-HD Master Audio or equivalent. It shall support smart EDID management, including 8-output EDID. It shall support HDMI2.0, HDCP2.2.</p> <p>It shall support RS-232 and TCP/IP Control. Human-body: ± 8kV.</p>	1		
13	Digital Podium with CPU	<p>Premium quality Podium to accommodate a conferencing gooseneck mic and 20-22" screen monitor (preferably touch), minimum 1920 x 1080 or higher resolution with HDMI &amp; VGA Interface. HDMI, VGA &amp; Audio faceplate. It shall have Key Board/Mouse tray and sliding top tray for Laptop. It shall come with HDMI, VGA &amp; USB patch cable connecting for monitor. Integrated Visualizer Tray, Single Lock System to Lock the Keyboard tray, Door lock and the Slider.</p> <p>Equipment's rack space. 6 port PDU &amp; a cooling fan.</p> <p>Supplied with a CPU/MINI PC: Configuration – Intel i7 or higher/AMD-R7 or higher (with latest generation), OEM Motherboard, RAM - minimum 16GB DDR-4 3200 MHz or higher and expandable upto 64GB, minimum 256 GB SSD + Minimum 1 TB HDD storage, Licensed Windows 11 Professional with x64 or higher, Ethernet, wireless and Bluetooth enabled. BIS registration certificate under CRS of MeitY: Yes</p>	1		
14	Gooseneck microphone with stand	<p>SITC of Table TOP Gooseneck Microphone with Base,</p> <p>Supports Cardioid, Omni Directional, Super-Cardioid, Bi-Directional (Figure of Eight), &amp; Uni-Directional Pickup Pattern or more</p> <p>Touch Button with LED Indication,</p> <p>Frequency response of 90 Hz - 20000 Hz (-3 dB). Maximum SPL 120 dB. Open Circuit Sensitivity -33.5 dBV, Distortion &lt;0.6%, Common Mode Rejection – min 45dB, Shall support 24V to 48V Phantom Power or battery power 1.5V*2, 3 PIN Balanced XLR Interface or better</p>	6		
15	60W speaker	<p>SITC of Two way speaker</p> <p>Frequency response of 60 Hz to 20,000 HZ. 8 Ohm impedance as well as 70V, 100V tapping. The speaker a maximum SPL of 107dB. 60 Watts or more Dynamic Power (Low Impedance). Transformer</p>	8		



		tapping of 60, 30, 15, 7.5 Watts & 4/8 ohm or more. 6.25" MF waterproof Driver and 1.5" HF waterproof Driver or better.			
16	Wireless Microphone Receiver	SITC Wireless Microphone Receiver, S/N ratio of $\geq 80$ dBA or better. It shall be able to use 40 or more Adjustable Channels. THD of $<0.5\%$ or better. Frequency response of 40 to 18,000 Hz or better. Balanced XLR Audio output and Unbalanced Audio Output. Receiving Distance of 50MTR or more.	4		
17	Wireless Lpel Microphone	SITC of Wireless Lpel Microphone transmitter, It comes with Omni directional Pickup pattern, Receiving distance upto 50Mtr, with FM modulation, Extended battery life.Easy setup and operation with user-friendly interface.	1		
18	Wireless Handheld Microphone	SITC of Wireless Handheld Microphone transmitter, It comes with cardioid Pickup pattern, Receiving distance upto 50Mtr, with FM modulation, Extended battery life. Easy setup and operation with user-friendly interface.	7		
19	Audio DSP	SITC of Digital Signal processor with inbuilt AEC. 12 nos. of Mic/Line Inputs Channels, 8 nos. of Line Outputs Channels, Input & Output Interface of Balanced 3-Pin Phoenix type connector terminals , 1x RS-232 & 1x RS-485 Control Interface, RJ-45(10/100 Base-T) Ethernet Connector for IP-Based PC Software, Host Control & Third-Party Controller, shall 1x USB Type-A Audio Interface with adaptive echo cancellation (AEC): 60dB/S convergence rate; 80dB echo cancellation for Soft VC Application, GPIO Interface or batter, Supports Camera Tracking, Achieving Voice Tracking or more, Built-in automatic noise suppression (ANS): making the SNR increase upto 18db, Built-in Microphone Adaptive Feedback Cancellation (AFC), automatic gain control (AGC) : auto-gain control $-6\text{dB}\sim+18\text{dB}$ ; auto-balance control $-12\text{dB}\sim+12\text{dB}$ , Digital Matrix, Automatic Mixing, Echo Cancellation, Noise Suppression or better, Phantom Power of + 48 VDC for Individual Input. Shall be Cascading upto 2 nos. Sampling Rate of 48 kHz or better. Frequency Response of 20Hz to 20kHz or better. It shall support Dante Interface. Support ducker, ANC, AM, and Gate Mixer. Definable UI for managing and configuring the max. of 30 units. Centralized control: easily one click to control the power of A/V equipment and switch the audio source. USB audio for soft Audio conferencing. It should be equipped with matrix function to self define the output audio sources. Centralized control via RS 232, RS 485 and UDP easily connect the third party equipment such as PTZ cameras.	2		
20	Amplifier	SITC of 500 Watts or more Mixing Amplifier. Microphone frequency response of 60Hz- 17000Hz or better. Line Frequency Response of 60 Hz-18000 Hz or better. Minimum impedance load bridged of 4 ohms per channel. 4 or more balanced microphone inputs. Up to 48V phantom power individually for four microphone inputs with On/Off. 2 or more line inputs. 1 Line output or better. Input sensitivity of $\pm 5$ mV/ 600 $\Omega$ for balanced Microphone inputs. Input sensitivity of 350mV/10k $\Omega$ for unbalanced Aux input. Output sensitivity of 1000mV/470 $\Omega$ for record output. 100V line as well as 4 to 16 ohm impedance output. THD of $>0.1\%$ at 1 KHz, 1/3 rated Power or better. Microphone input overload of fifteen db or greater. The microphone inputs shall override over other audio inputs by 30 dB attenuation via switch. Gain control of $\pm 2.5\text{mV}$ to $\pm 75\text{mV}$ @ 30dB. Cross talk of $\geq 50$ dB or better. High temperature, overload and short circuit protection. Power down after 15 minutes of no signal and comply with Energy Star Power consumption limits of $< 0.5\text{W}$ in standby. LED at the front panel to indicate the current operation status. It shall get operated from AC as well as DC.	1		

21	Subwoofer	SITC of 500 Watts 2 way Subwoofer with Frequency Response of 40-700Hz. Waterproof, moisture-resistant, easy to maintain. Flexible installation. Class-D Amplifier, Optimized magnetic flux distribution. Power overload protection.	1		
22	Cables & connectors	Supply of HDMI Cable, Speaker Cable, Microphone cable, Audio Patch Cords, other cables & Connectors to complete the site in all respect.	As per need		
23	Onsite Installation, Programming & Labour	Programming. Installation, Testing, Configuration & User training to establish a working system	One time		
24	Warranty/CAMC	All items should be covered under warranty of minimum 3 years and thereafter under CAMC for the subsequent 2 years.	One Lot		

## **ADDITIONAL TERMS AND CONDITIONS**

### **1. Bid Validity**

The bid shall remain valid for acceptance for the period given in bid document. In exceptional cases, the bidder may be requested by the purchaser to extend the validity of their bid up to a specified period. Such request(s) and responses thereto shall be conveyed through GeM Portal. The bidders, who agree to extend the bid validity, are to extend the same without any change or modification of their original bid. A bidder, who may not agree to extend its bid validity after the expiry of the original validity period, their bid will not be considered further.

### **2. Purchaser's Right to accept any bid and to reject any or all bids.**

The purchaser reserves the right to accept in part or in full any bid or reject any or more bid(s) without assigning any reason or to cancel the bid process and reject all bids at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder(s).

### **3. Patent Rights**

The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.

### **4. Packing and Marking**

- a) The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transshipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract
- b) The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the supplier accordingly.

- c) Unless otherwise mentioned in the Technical Specification, the supplier shall make separate packages for each consignee (in case there is more than one consignee mentioned in the contract) and mark each package on three sides with the following with indelible paint of proper quality:
  - i. Contract number and date
  - ii. Brief description of goods including quantity
  - iii. Packing list reference number
  - iv. Country of origin of goods
  - v. Consignee's name and full address and
  - vi. Supplier's name and address

#### **5. Inspection, Testing and Quality Control**

- a) The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. In case the goods are rejected in the first instance and the supplier requests for re-inspection, and if same is accepted by Purchaser/Consignee, all subsequent inspections shall be at the cost of the supplier. The expense will be to and from Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period."
- b) The Technical Specification incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.
- c) If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and re-submit the same to the purchaser's inspector for conducting the inspections and tests again.
- d) In case the contract stipulates pre-dispatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.
- e) If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.
- f) The purchaser's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-dispatch inspection mentioned above.

- g) "On rejection, the supplier shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser/consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser/consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for."
- h) Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract.
- i) Principal/ Foreign supplier shall also have the equipment inspected by recognized/ reputed agency prior to dispatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

## **6. Insurance**

- a) The supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured from warehouse to warehouse (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.
- b) If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the consignee. In case the delay in the installation and commissioning is due to handing over of the site to the supplier by the consignee/End User, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actual will be reimbursed.

## **7. Spare parts**

- a) If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:
- b) The spare parts as selected by the Purchaser/End User to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and
- c) In case the production of the spare parts is discontinued:
  - i. Sufficient advance notice to the Purchaser/End User before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and
  - ii. Immediately following such discontinuation, providing the Purchaser/End User, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/End User.
  - iii. Supplier shall carry sufficient inventories to assure ex-stock supply of consumables and spares for the goods so that the same are used during warranty and CAMC period.

## **8. Incidental Services**

The supplier shall be required to perform the following services:-

- a) Installation & Commissioning, Supervision, Demonstration, Trial run etc. of the goods.
- b) Turnkey work (if any).
- c) Training of Consignee's/End Users, Staff, operators etc. for operating and maintaining the goods.
- d) Supplying required number of operation & maintenance manual for the goods.

## **9. Distribution of Dispatch Documents for Clearance/Receipt of Goods**

The supplier shall send all the relevant dispatch documents well in time to enable the purchaser clear or receive (as the case may be) the goods in terms of the contract.

## **10. Assignment**

The Supplier shall not assign, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with the Purchaser's prior written permission.

## **11. Sub Contracts**

- a) The Supplier shall notify the Purchaser in writing of all sub contracts awarded under the contract, if not already specified in its bid. Such notification, in its original bid or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.
- b) Sub contract shall be only for bought out items and sub-assemblies.
- c) Sub contracts shall also comply with the provisions of Clause regarding "Country of Origin".

## **12. Modification of Contract**

- a) If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:
  - i. Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for the purchaser,
  - ii. Mode of packing,
  - iii. Incidental services to be provided by the supplier
  - iv. Mode of dispatch,
  - v. Place of delivery, and
  - vi. Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.
- b) In the event of any such modification/alteration causing increase or decrease in the cost of goods and services to be supplied and provided, or in the time required by the supplier to perform any obligation under the contract, an equitable adjustment shall be made in the contract price and/or contract delivery schedule, as the case may be, and the contract amended accordingly. If the supplier doesn't agree to the adjustment made by the Purchaser the supplier shall convey its views to the Purchaser within seven days from the date of the supplier's receipt of the Purchaser's amendment / modification of the contract.

## **13. Taxes and Duties**

Supplier shall be entirely responsible for GST incurred until delivery of the contracted goods to the purchaser.

#### **14. Payment Terms**

- a) Payment shall be made against submission of "Installation and Acceptance Certificate" of goods to be issued by the End User subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. "Installation and Acceptance Certificate" need to be issued by the concerned End User after installation, commissioning, testing and successful trail run (if applicable).
- b) The payment for turnkey/ Civil/Electrical/Air-Conditioning Works shall also be made on submission of "Installation and Acceptance Certificate" by the End User.
- c) The consignee will enter into CAMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on six monthly/yearly basis after satisfactory completion of said period, duly certified by the End User on receipt of bank guarantee for an amount equivalent to 3 % of the cost of the equipment as per contract in the rescribed format given hereunder valid till 3 months after expiry of entire CAMC period.
- d) The supplier shall not claim any interest on payments under the contract.
- e) Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the Supplier at rates as notified from time to time.
- f) The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date.
- g) While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that, payment has been fulfilled as required under the contract.
- h) While claiming reimbursement of duties, taxes etc. (like GST, Custom Duty etc.) from the Purchaser, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, the supplier shall refund to the Purchaser forthwith.

#### **15. Delivery**

- a) The supplier shall deliver the goods and perform the services under the contract within the time schedule specified by the Purchaser in the contract. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of the contract and the delivery must be completed no later than the date (s) as specified in the contract.
- b) Any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions:
  - (i) Imposition of liquidated damages,
  - (ii) Forfeiture of its Performance Security and
  - (iii) Termination of the Contract for default.
- c) If at any time during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform the Purchaser in writing about the same and its likely duration and make a request to the Purchaser for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.
- d) When the period of delivery is extended due to unexcused delay by the supplier, the amendment letter extending the delivery period shall, inter alia contain the following conditions:
- e) The Purchaser shall recover from the supplier Liquidated Damages on the goods and services, which the Supplier has failed to deliver within the delivery period stipulated in the contract.

- f) That no increase in price on account of any ground, whatsoever, including any stipulation in the contract for increase in price on any other ground and, also including statutory increase in or fresh imposition of GST levied in respect of the goods and services specified in the contract, which takes place after the date of delivery stipulated in the contract shall be admissible on such of the said goods and services as are delivered and performed after the date of the delivery stipulated in the contract.
- g) But nevertheless, the Purchaser shall be entitled to the benefit of any decrease in price on account of reduction in or remission of Custom Duty and GST which takes place after the expiry of the date of delivery stipulated in the contract.
- h) The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the Purchaser for extension of delivery period and obtain the same before dispatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall lie against the purchaser.

#### **16. Passing of Property**

- a) The property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the contract.
- b) Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.
- c) Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser

#### **17. Liquidated Damages**

- a) If the supplier fails to deliver or install /commission any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser shall, without prejudice to other rights and remedies available to the Purchaser under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.50% per week of delay or part thereof on delayed supply of goods, installation, commissioning and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser may consider termination of the contract.
- b) During the above-mentioned delayed period of supply and/or performance, the conditions incorporated under clause 16 above shall also apply.

#### **18. Termination for Default**

- a) The Purchaser without prejudice to any other contractual rights and remedies available to it the Purchaser, may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser
- b) The Performance Security in such cases will be forfeited
- c) Unless otherwise instructed by the Purchaser, the supplier shall continue to perform the contract to the extent not terminated.

#### **19. Termination for Insolvency**

If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Purchaser.

## 20. Resolution of Disputes

- a) If dispute or difference of any kind shall arise between the Purchaser/Consignee and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.
- b) If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/Consignee or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India.
- c) In the case of a dispute or difference arising between the Purchaser and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration to be appointed by the Director, ICAR-CIWA. The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award in case the value of claim in reference exceeds Rupees One lakhs (Rs. 1,00,000/-).
- d) **Venue of Arbitration:** The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.
- e) **Jurisdiction of the court** will be from the place where the Tender Document has been issued, i.e., New Delhi, India
- f) **Applicable Law:** The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.

## 21. Withholding and Lien in respect of sums claimed

- a) Whenever any claim for payment arises under the contract against the supplier the purchaser shall be entitled to withhold and also have a lien to retain such sum from the security deposit or sum of money arising out of under any other contract made by the supplier with the purchaser, pending finalization or adjudication of any such claim.
- b) It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred to above, by the purchaser, will be kept withheld or retained till the claim arising about of or under the contract is determined by the Arbitrator or by the competent court as the case may be and the supplier will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention.

## 22. Fall Clause

Fall clause is a price safety mechanism. The fall clause provides that if the contract holder reduces its price or sells or even offers to sell the contracted goods of identical specification and terms & conditions to that of the contract, at a price lower than the contract price, to any person or organization during the currency of the Contract, the Contract price will be automatically reduced with effect from that date for all the subsequent supplies under the Contract and the contract amended accordingly.

## 23. LIST OF REQUIREMENTS

Name of Equipment	Procurement and Installation of Audio-Visual System with Video Conferencing Facilities
Total Quantity	As per bid requirement
Warranty Period	3 years (will start from the date of installation, commissioning and acceptance)
CAMC period after warranty	2 years



Required Delivery Schedule	15 days from date of Notification of Award to delivery at consignee site. Being the turnkey project, the bidder shall complete all installation, commissioning, inspection within 15 days period failing which L.D. charges are applicable
Required Terms of Delivery and Destination	Free Delivery at Consignee's Site(s)
Installation and Commissioning	Shall be done within 15 Days period
Scope of Incidental Services	Installation & Commissioning, Supervision, Demonstration, Trial run and Training etc.
Turnkey Work (if any)	As per details in Technical Specification

**24. Warranty:**

- a) The bidders must quote for Comprehensive Warranty (Including all spares, labour and third party items) and Turnkey Work (if required) from the date of satisfactory installation, commissioning, trial run, handing and acceptance by the User Department
- b) The warranty charges shall not be quoted separately
- c) During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period will be extended by double the downtime period. In addition, a penalty equal to amount of 0.25 % of the total cost of equipment per day will be liable for the excess downtime period but not more than 10% of the equipment cost. Complaints should be attended properly, maximum within 8 hrs. The firm must ensure provision of quality post sale service with 95% uptime of the equipment. The firm has to provide a replacement unit (same model) in case the time taken for repair is long
- d) All software updates should be provided free of cost during Comprehensive Warranty period.

**25. After Sales Service:**

- a) After sales service centre should be available at the city of Institution on 24 (hrs) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 8 hrs. The service should be provided directly by Bidder/Indian Agent. Undertaking by the Principals in the "Manufacturer Authorisation Form" that the spares for the equipment shall be available for the lifetime of the equipment
- b) Warranty as well as Comprehensive Annual Maintenance Contract for the additional 2 years will be inclusive of all accessories and turnkey work and it will also cover the following, wherever applicable:
  - i. All kinds of Motors.
  - ii. Plastic & Glass Parts against any manufacturing defects.
  - iii. All kinds of sensors.
  - iv. All kinds of coils, probes and transducers.
  - v. Printers and imagers including laser and thermal printers with all parts.
  - vi. UPS including the replacement of batteries
- c) The supplier along with its Manufacturer, Indian Agent and the CAMC provider shall ensure continued supply of the spare parts for the machines and equipment supplied by them to the purchaser for lifetime of the equipment.
- d) The Supplier along with its Manufacturer Indian Agent and the CAMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipment/machines/goods etc. and shall always give the most competitive price for its machines/equipment supplied to the Purchaser/Consignee.

**26. Uptime & Downtime Penalty Clause:**

- a) The firm should provide uptime guarantee of 95% during warranty period.
- b) During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs.), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. In addition a penalty equal to amount of 0.25 % of the total cost of equipment per day will be leviable for the excess downtime period to Maximum of 10% of Cost of the Equipment.
- c) Complaints should be attended properly, maximum within 8 hrs.

**27. Turnkey Work:**

Turnkey Work is to be indicated in the Technical Specification wherever required. The Bidder shall examine the existing site where the equipment is to be installed, in consultation with User Department. The Turnkey Work costs will be added for Ranking Purpose. The Turnkey Work should completely comply with ICAR-CIWA requirement, wherever required

**28. Demonstration**

The Purchaser reserves the right to ask for a free demonstration of the quoted equipment after giving reasonable time to the bidder at a pre-determined place acceptable to the purchaser or at site (in case of non-portable and heavy equipment) for technical acceptability as per the Bid Document specifications, before the opening of the Price Bid

- 29.** The required information for this tender should be furnished in the enclosed format only, failing which bid may be liable to get rejected.

**CHECK LIST**  
**DETAILS OF DOCUMENTS TO BE PROVIDED AGAINST GeM BID**

Sl. No.	Particular/ Documentation	Provided (Yes/No)	Enclosed at Page No.
1	Tender Acceptance Form (Annexure - III)		
2	Copy of Registration Certificate of Firm/Establishment		
3	Copy of GST Registration and PAN Card		
4	Copies of Income Tax Returns for the last 3 years' (Financial Year 2021-22, 2022-23 and 2023-24) Note: Assessment year will be 2022-23, 2023-24 and 2024-25 respectively		
5	Copy of Audited Balance Sheet and Profit & Loss Statement for the Financial Year 2021-22, 2022-23 and 2023-24 duly attested by a registered Chartered Accountant		
6	Copy of Udyam Registration Certificate (if seeking exemption)		
7	Annual Turnover certificate of the bidder for the last 03 financial years (Financial Year 2021-22, 2022-23 and 2023-24) duly certified by a registered Chartered Accountant		
8	Annual Turnover certificate of OEM for the last 03 financial years (Financial Year 2021-22, 2022-23 and 2023-24) duly certified by a registered Chartered Accountant		
9	Original Equipment Manufacturer (OEM)'S Authorization Form (Annexure - IV)		
10	Self-Certification on company letter head: Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 (Land Border Sharing) (Annexure - V)		
11	Local Content Deceleration under Preference to "MAKE IN INDIA" Policy (Annexure -VI)		
12	Experience Certificate/ Past performance Certificate as per bid requirement (Annexure - VII)		
13	Bid Securing Declaration Form on Company's letter head (Annexure – VIII)		
14	Undertaking on Company letter head regarding Fall Clause (Annexure - IX)		
15	Undertaking on company letter head regarding that the firm is not blacklist by Govt./Pvt. Organization and there is no vigilance/FEMA/Court case is pending against the firm (Annexure - X)		
16	Technical Specification Compliance/Deviation (Annexure - I)		
17	Quoted Product Brochure/Catalogue		
18	Compliance undertaking regarding Comprehensive Warranty and Post Warranty CAMC, if any, as per requirement of the Bid.		
19	Any other additional information/documentation as required in the bid		

\*All documents along with above check list shall be dully signed and stamped by the bidder.

**TENDER ACCEPTANCE FORM**  
(To be submitted on bidder's letter head)

To,  
Director,  
ICAR-CIWA  
Kalinganagar, Bhubaneswar-751003 Odisha.

**Ref:** Your Bid No. GEM/2024/B/5353956 due for opening on \_\_\_\_\_

We, the undersigned have examined the above mentioned Bid document, including amendment /corrigendum, the receipt of which is hereby confirmed. We now offer to supply and deliver \_\_\_\_\_ (Description of goods and services) in conformity with your above referred document for the sum as shown in the Price Schedules attached herewith and made part of this bid. If our bid is accepted, we undertake to supply the goods and perform the services as mentioned in the bid documents, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our bid is accepted, we shall provide you with a performance security of required amount in an acceptable form for due performance of the contract.

We agree to keep our bid valid for acceptance as required or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this bid up to the aforesaid period and this bid may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this bid read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any bid you may receive against your above-referred Bid.

We confirm that we do not stand deregistered/banned/blacklisted by any Central Govt. Ministries/Departments/Hospitals/Institutes. We also confirm that our GeM account is neither under watch listed nor suspended and there is no severe incident pending against us raised by any Department/Institute of ICAR

We confirm that we fully agree to the terms and conditions specified in above mentioned document, including amendment/ corrigendum. "We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the purchaser in addition to enforcement of the bid security."

Name \_\_\_\_\_  
Business Address \_\_\_\_\_

Place: \_\_\_\_\_  
Date: \_\_\_\_\_

**ORIGINAL EQUIPMENT MANUFACTURER (OEM)'S AUTHORISATION FORM**

(To be submitted on firm's letter head)

To,  
Director,  
ICAR-CIWA  
Kalinganagar, Bhubaneswar-751003 Odisha.

Dear Ma'am,

**Ref:** Your Bid No. GEM/2024/B/5353956 due for opening on \_\_\_\_\_

We, \_\_\_\_\_ who are proven and reputable manufacturers of \_\_\_\_\_ (name and description of the goods offered in the bid) having factories at \_\_\_\_\_, hereby authorize Messrs \_\_\_\_\_ (name and address of the agent) to submit a bid, process the same further and enter into a contract with you against your requirement as contained in the above referred Bid documents for the above goods manufactured by us.

We also state that we are not participating directly in this bid for the following reason(s):  
\_\_\_\_\_ (please provide reason here).

We further confirm that no supplier or firm or individual other than Messrs. \_\_\_\_\_ (name and address of the above agent) is authorized to submit a bid, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also hereby extend our full warranty, CAMC as required for the goods and services offered for supply by the above firm against this Bid document.

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent and the spares for the equipment shall be available for the lifetime of the equipment.

We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly

Yours faithfully,

[Signature with date, name and designation]  
for and on behalf of Messrs \_\_\_\_\_  
[Name & address of the manufacturers]

**Note:**

1. This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

**Format for Self Certification**

Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017

**CERTIFICATE**

In line with O.M. "Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017" vide office memorandum no. F.No.6/18/2019-PPD, Ministry of Finance dated 23.07.2020, "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this vendor/ bidder M/s \_\_\_\_\_ is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this vendor/ bidder M/s \_\_\_\_\_ fulfils all requirements in this regard and is eligible to be considered for procurement on GeM.

[Where applicable, evidence of valid registration by the Competent Authority shall be attached]

We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rule for which a bidder or its successor can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rule along with such other actions as may be permissible under law.

**Seal and Signature of Authorized Signatory**

**Format for Self Certification**

For Local Content declaration to be provided on the company's Letter Head  
duly attested by the bidder.

**CERTIFICATE**

GEM Bid Number \_\_\_\_\_ Date: \_\_\_\_\_

I \_\_\_\_\_ S/o,D/o,W/o \_\_\_\_\_,  
Resident of \_\_\_\_\_  
\_\_\_\_\_ do hereby solemnly affirm and declare as under:

That the local content is \_\_\_\_\_% for the \_\_\_\_\_ (Consolidated for  
quoted Items) of M/s \_\_\_\_\_.

That I on behalf of M/s \_\_\_\_\_ will agree to abide by the  
terms and conditions of the policy of Government of India issued vide relevant Notifications issued  
under order no. Order No. P45021/2/2017-B.E.-II dated 15.06.2017 Public Procurement (Make in  
India) order 2017 issued DPIIT, Ministry of Commerce and Industry, GOI and calculations for local  
content have been done accordingly.

That the information furnished hereinafter is correct to best of my knowledge and belief and I on  
behalf of M/s \_\_\_\_\_ undertake to produce relevant  
records before the procuring agency/entity or any other authority so nominated by the concerned  
department, GOI for the purpose of assessing the local content.

(Name of firm/entity)  
Authorized signatory

Note: - The local content declaration shall be as per point 5 of Public Procurement (Preference to  
Make in India) Order (PPO) 2017 dated: -16.09.2020.)

**RELEVANT WORK EXPERIENCE DETAILS**  
(To be submitted on Firm's Letter head)

Sl. No	Name of the Dept/Organization where Supply, installation and Commissioning of VC System with peripherals	Period	
		From	To
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

**Seal and Signature of Authorized Signatory**

Place:

Date:

**Note:** While uploading this Annexure in GeM, bidder should make sure that work experience certificates are also uploaded along with this in one single pdf



(To be submitted on Firm's Letter head)

To,  
Director,  
ICAR-CIWA  
Kalinganagar, Bhubaneswar-751003 Odisha.

Dear Ma'am,

**Ref:** Your Bid No. GEM/2024/B/5353956

We, the undersigned, declare that: We understand that, according to your conditions, bids must be supported by a Bid-Securing Declaration.

We accept that we will automatically be suspended from being eligible for bidding in any contract with your institute or any other ICAR Institute for the period of time of 3 years starting on date of closing of bids if we are in breach of our obligation(s) under the bid conditions, because we:

- a) have withdrawn our Bid during the period of bid validity specified in the Letter of Bid; or
- b) having been notified of the acceptance of our Bid by your institute during the period of bid validity:
  - i. fail or refuse to execute the Contract, if required, or
  - ii. fail or refuse to furnish the Performance Security as per tender conditions

We understand this Bid-Securing Declaration shall expire if we are not the successful Bidder.

**Seal and Signature of Authorized Signatory**

**Price Fall Clause Certificate**

(To be submitted in the bidder's company letter head)

I/We undertake that we have not offered to supply / supplied / are not supplying same or similar products / systems or sub systems at a price lower than that offered against the GeM Bid No: ..... dated ..... in respect of any Organization/Ministry/Department of the Govt. of India or its Subsidiaries or other PSU or any other private organization during the currency of the contract and if it is found at any stage that same or similar product/systems or sub systems was supplied by the bidder to any Organization/Ministry/Department of the Govt. of India or its Subsidiaries or other PSU or any other private organization at a lower price during the currency of the contract, then that very price will be applicable to the present case and the difference in the cost would be refunded by the bidder to buyer, if the contract has already been concluded.

**Seal and Signature of Authorized Signatory**

**Date:**

**Self – Declaration – Non-Blacklisting**  
(To be submitted on bidder's company letter head)

To,  
Director,  
ICAR-CIWA  
Kalinganagar, Bhubaneswar-751003 Odisha.

Dear Ma'am,

In response to the Bid No. \_\_\_\_\_ Dated \_\_\_\_\_ for Procurement, Installation, Establishment & Commissioning of Audio Visual System/Video Conferencing System on turnkey basis at ICAR-CIWA, I/We hereby declare that presently our Company / Firm \_\_\_\_\_ is having unblemished record and is not declared ineligible for corrupt & fraudulent practices either indefinitely or for a particular period of time by any State / Central Government / PSU / Autonomous Body.

We further declare that presently our Company/ firm \_\_\_\_\_ is not blacklisted and not declared ineligible for reasons other than corrupt & fraudulent practices by any State /Central Government /PSU/Autonomous Body on the date of Bid Submission.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/our security may be forfeited in full and the tender if any to the extent accepted may be cancelled.

Thanking You,

Yours faithfully,

[Signature with date, name and designation of Authorised Signatory]

## TECHNICAL COMPLIANCE MATRIX

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
1	55" 4K UHD Display	<p>SITC of 55 inch TV            Size 3840 X 2160 (UHD) Resolution 4K Display,            Backlight Unit Type Direct, Brightness of 400 nits or more, Dynamic Contrast Ratio (Dynamic MCI (Hz)) 1,000,000:1 or More, Static (Panel) Contrast Ratio 1300:1 or more, Refresh Rate 60Hz or more, HDR (10 Pro / HLG technology or better, Speaker (sound output) 10W + 10W or more, Digital (Terrestrial, Cable, Satellite) DVB-T2/C or more, One Channel Map,IP Channel Manager; External Speaker Out (Int Variable/Fixed, 3.5mm, Stereo, Single ended Type (GND,L+,R+), 2W+2W with 80), Smart Home (Launcher Bar), Web Browser Pre-loaded App (YouTube only), SDP Server compatibility, WiFi (Version) (802. 11ac), Screen Share (Miracast), Smart Share, Bluetooth Audio Playback, HDMI-ARC (ARC, HDMI2), Vertical Setup, Fail Over, Play Via URL, NTP Server Setting, CISCO Certi. Compatibility ,Crestron Connected (Network Based Control), DPM (Digital Power management), Time scheduler, RTC (Real Time Clock), NTP sync timer, BEACON, Embedded CM (contents manager), Embedded GM (Group manager). Front &amp; rear Interface of: HDMI In (3 (2.0)), Headphone Out (Phone Jack Type), RS-232C (D-Sub 9pin / Phone jack) (Phone Jack, 4pi), USB (2.0), RF In, Digital Audio Out (Optical), External Speaker Out (3.5mm phone jack), RJ45 (Usage Purpose) (LAN) or more. CB, CU TR, CE Certification</p>	2		

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
2	43" 4K UHD Display	SITC of 43 inch TV Size 3840 X 2160 (UHD) Resolution 4K Display, Backlight Unit Type Direct, Brightness of 300 nits or more, Dynamic Contrast Ratio (Dynamic MCI (Hz)) 1,000,000:1 or More, Static (Panel) Contrast Ratio 1200:1 or more, Refresh Rate 60Hz or more, Speaker (sound output) 10W + 10W or more, Digital (Terrestrial, Cable, Satellite) DVB-T2/C or more, External Speaker Out (Int Variable/Fixed, 3.5mm, Stereo, Single ended Type(GND,L+,R+), 2W+2W with 80), Smart Home, Web Browser Pre-loaded App (YouTube), SDP Server compatibility, Mood Display, Soft AP, WiFi (Version) (802. 11ac), Screen Share (Miracast), Smart Share, Bluetooth Audio Playback, HDMI-ARC (ARC, HDMI2), Vertical Setup, Fail Over, Play Via URL, NTP Server Setting, CISCO Certi. Compatibility ,Crestron Connected (Network Based Control), DPM (Digital Power management), Time scheduler, RTC (Real Time Clock), NTP sync timer, BEACON, Embedded CM (contents manager), Embedded GM (Group manager). Front & rear Interface of: HDMI In, Headphone Out (Phone Jack Type), RS-232C (D-Sub 9pin / Phone jack) (Phone Jack, 4pi) , USB (2.0), RF In, Digital Audio Out (Optical), External Speaker Out(3.5mm phone jack), RJ45 (Usage Purpose) (LAN)or more. CB, CU TR, CE Certification	2		
3	55" Moveable stand	SITC of 55" Moveable stand shall be Wall / Ceiling Mounting type as per site requirement.	2		
4	43" Floor stand	SITC of Floor stand for 43" Display	2		

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
5	Laser Projector	SITC Of 5200 ANSI Lumens LCD Projector Systems, PROJECTOR TYPE LCD Projectors Or Better, BRIGHTNESS Of 5200 Lm Or More, WUXGA Resolution Or more, LAMP LIFE 20,000 Hours Or More, LASER LIGHT SOURCE Technology Or More, CONTRAST RATIO Of 30,000,00 :1 Or More, KEYSTONE CORRECTION RANGE Vertical: ±25 °, Horizontal: ±35 ° Or More, The HDMI Interface Shall Support Compatible With HDCP, Deep Colour, 4K/30p6 Signal Input Or More, ZOOM 1.6X Zoom Lens Or More, Interfaces Like : INPUT : HDMI X 2, VGA IN X 2, Video IN X 1, Audio IN X 3 USB Type A X1, RS232 X 1, LAN X 1, HD Base-T X 1, OUTPUT: VGA Out X 1, Audio Out X 1 Or More, LENS 1.6x Manual Zoom of more, Manual Focus Lens, F 1.60–2.12, F 15.30–24.64 Mm Or More, FIXED ZOOM LENS OF THROW RATIO 1.09- 1.77:1 Or More.	1		
6	Projector Stand	SITC of Projector Stand with Ceiling mounting options, Height adjustment of up to 6ft, It shall be supplied with All related hardware's.	1		
7	135" motorized screen	SITC of 135" motorized screen, 16:9 or 16:10 Aspect ratio or more, IR/RF remote control, It shall be supplied with IR/RF Remote, Wall mounting options.	1		

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8	3 KVA UPS	<p>SITC of 3KVA UPS Online configuration with double conversion UPS &amp; Zero transfer time. Wide Input voltage range from (110 ~ 300VAC) Auto restart &amp; capability with the Independent battery bank operation of the UPS.</p> <p>UPS should be designed at Rated PF of 0.9 i.e. 3kVA/2.4kW UPS rating. Generator compatibility with cold start and AC start features. Automatic bypass to transfer the load on mains due to overload &amp; internal fault. Programable output socket for load segmentation.</p> <p>Input type: Single-Phase / 2-Wire &amp;Gnd (1Phase &amp; Neutral + Ground). Nominal Input Frequency of 50 or 60Hz or more, Input Frequency Range 40 to 70 Hz or more, Input Power Factor &gt; 0.99(@ full load) or more, Generator Compatibility Compatibility to genset supply required, Input Protection Should be provided at the input of the UPS suitable for the full rated capacity of the UPS.</p>	1		

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
9	20X camera	<p>SITC of PTZ camera  1/2.8 HD CMOS sensor or better. Option for Auto or Manual White Balance. S/N Ratio of &gt;55db. 20x optical zoom or better. 12x digital zoom or better. USB 3.0 port for unified communication applications, HDMI/DVI Port for Hardware Equipment &amp; IP interface for monitoring. RJ-45 network interface for Monitoring applications.  It shall support TCP/IP, HTTP Port &amp; RTSP Port. Support configurable site addressing while streaming with Time stamp. Shall support Dual H.264 and H.265 Streams with Option of Full HD, HD and SD resolution. It shall support Video format on USB as well as HDMI of 1080p 60/50 fps, 1080i 60/50 fps, 1080p 30/25 fps, 720p 60/50/30/25 fps, At least 4 Infra Red Identities. At least one preset shall get recalled whenever camera is powered on. It shall support 60 fps on both USB 3.0 as well as HDMI interface or better. An RS 232C port as well as RS-422/485 Port for Communication. RJ-45 Control port with TCP/IP Controlling.  68° or better field of view.  Pan Rotation Angle of -170degrees to +170 degrees or better.  A Tilt Rotation Angle of -30 degrees to + 90 degrees or better.  Supplied with IR remote control, Control Cable, Mounting bracket, Operation Manual, Mounting Screws and Camera Cable as an included accessory.</p>	1		



Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
10	12X camera	<p>SITC of PTZ camera  1/2.7 HD CMOS sensor or better. option of Auto or Manual White Balance. S/N Ratio of &gt;55db.  12x optical zoom or better. 12x digital zoom or better.  USB 3.0 port for unified communication applications, HDMI/DVI Port for Hardware Equipment's &amp; IP interface for monitoring.  RJ-45 network interface for Monitoring applications. Support TCP/IP, HTTP Port &amp; RTSP Port shall be configurable.  Support configurable site addressing while streaming with Time stamp. Support Dual H.264 and H.265 Streams with Option of Full HD, HD and SD resolution. Support Video format on USB as well as HDMI of 1080p 60/50 fps, 1080i 60/50,1080p 30/25,720p 60/50/30/25 fps, at least 4 Infra Red Identities. At least one preset shall get recalled whenever camera is powered on.  It shall support 60 fps on both USB 3.0 as well as HDMI interface or better. RS 232C port as well as RS-422/485 Port for Communication.  RJ-45 Control port with TCP/IP Controlling. At least 100 Position Presets through keyboard or third party controller and at least 9 position presets through IR remote or better.  68° or better field of view.  Pan Rotation Angle of -170degrees to +170 degrees or better.  Tilt Rotation Angle of -30 degrees to + 90 degrees or better.  Supplied with IR remote control, Control Cable, Mounting bracket, Operation Manual, Mounting Screws and Camera Cable as an included accessory</p>	3		

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
11	Vision Mixer	<p>Video Mixing Unit with UC application with at least 4 HDMI Inputs and 2 HDMI Output. USB type C or 3.0 interface for UC applications.</p> <p>It shall support resolutions of 1080p 60/ 59.94/ 50/ 30/ 29.97/ 25/ 24/ 23.98, 1080i 50/ 59.94/ 60, 720p 60/ 59.94/ 50/ 30/ 29.97/ 25/ 24/ 23.98, 576i 50, 576p 50, 480p 59.94/ 60, 480i 59.94/ 60 on HDMI Input.</p> <p>It shall support resolutions of 1080p 60/ 59.94/ 50/ 48/ 47.95/ 30/ 29.97/ 25/ 24/ 23.98; 1080i 60/ 59.94/ 50 on both HDMI outputs</p> <p>It shall support resolutions of up to 1080p on UC interface.</p> <p>RS-232 or RJ-45 control interface. Control operation through buttons, RJ-45 or USB. It shall support all standard Image format. It shall support following Logo size: 10×10 pixel to 600×600 pixel. Audio Mixing: HDMI ×4 and MIC/ Line level ×2, PIP, POP. It shall support 9x2 or more patterns including, mute, freeze. It shall be supplied with Power Adaptor and USB cable.</p>	2		

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
12	8x8 HDMI Matrix Switcher	<p>SITC of HDMI matrix switching system  8 HDMI 2.0 Inputs with 3.5mm Audio Embedding interface for each input. 8 HDMI 2.0 Outputs with 3.5mm audio de embedding interface for each output.  It shall support 480i, 576i, 480p, 576p, 720p, 1080i, 1080p@24/30/50/60Hz, 4K@60Hz or better.  1x RS-232 In, 1x RS-232 out and 1x RJ-45 interface.  Support controlling through IR remote, front buttons control, RS232, UDP. It shall support LPCM 7.1CH, Dolby TrueHD, Dolby Digital and DTS-HD Master Audio or equivalent. It shall support smart EDID management, including 8-output EDID. It shall support HDMI2.0, HDCP2.2.  It shall support RS-232 and TCP/IP Control. Human-body: ± 8kV.</p>	1		

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
13	Digital Podium with CPU	<p>Premium quality Podium to accommodate a conferencing gooseneck mic and 20-22" screen monitor (preferably touch), minimum 1920 x 1080 or higher resolution with HDMI &amp; VGA Interface. HDMI, VGA &amp; Audio faceplate. It shall have Key Board/Mouse tray and sliding top tray for Laptop. It shall come with HDMI, VGA &amp; USB patch cable connecting for monitor. Integrated Visualizer Tray, Single Lock System to Lock the Keyboard tray, Door lock and the Slider. Equipment's rack space. 6 port PDU &amp; a cooling fan.</p> <p>Supplied with a CPU/MINI PC: Configuration – Intel i7 or higher/AMD-R7 or higher (with latest generation), OEM Motherboard, RAM - minimum 16GB DDR-4 3200 MHz or higher and expandable upto 64GB, minimum 256 GB SSD + Minimum 1 TB HDD storage, Licensed Windows 11 Professional with x64 or higher, Ethernet, wireless and Bluetooth enabled. BIS registration certificate under CRS of MeitY: Yes</p>	1		
14	Gooseneck microphone with stand	<p>SITC of Table TOP Gooseneck Microphone with Base, Supports Cardioid, Omni Directional, Super-Cardioid, Bi-Directional (Figure of Eight), &amp; Uni-Directional Pickup Pattern or more Touch Button with LED Indication, Frequency response of 90 Hz - 20000 Hz (-3 dB). Maximum SPL 120 dB. Open Circuit Sensitivity -33.5 dBV, Distortion &lt;0.6%, Common Mode Rejection – min 45dB, Shall support 24V to 48V Phantom Power or battery power 1.5V*2, 3 PIN Balanced XLR Interface or better</p>	6		

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
15	60W speaker	SITC of Two way speaker Frequency response of 60 Hz to 20,000 HZ. 8 Ohm impedance as well as 70V, 100V tapping. The speaker a maximum SPL of 107dB. 60 Watts or more Dynamic Power (Low Impedance). Transformer tapping of 60, 30, 15, 7.5 Watts & 4/8 ohm or more. 6.25" MF waterproof Driver and 1.5" HF waterproof Driver or better.	8		
16	Wireless Microphone Receiver	SITC Wireless Microphone Receiver, S/N ratio of $\geq 80$ dBA or better. It shall be able to use 40 or more Adjustable Channels. THD of $<0.5\%$ or better. Frequency response of 40 to 18,000 Hz or better. Balanced XLR Audio output and Unbalanced Audio Output. Receiving Distance of 50MTR or more.	4		
17	Wireless Lpel Microphone	SITC of Wireless Lpel Microphone transmitter, It comes with Omni directional Pickup pattern, Receiving distance upto 50Mtr, with FM modulation, Extended battery life.Easy setup and operation with user-friendly interface.	1		
18	Wireless Handheld Microphone	SITC of Wireless Handheld Microphone transmitter, It comes with cardioid Pickup pattern, Receiving distance upto 50Mtr, with FM modulation, Extended battery life. Easy setup and operation with user-friendly interface.	7		

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
19	Audio DSP	<p>SITC of Digital Signal processor with inbuilt AEC. 12 nos. of Mic/Line Inputs Channels, 8 nos. of Line Outputs Channels, Input &amp; Output Interface of Balanced 3-Pin Phoenix type connector terminals , 1x RS-232 &amp; 1x RS-485 Control Interface, RJ-45(10/100 Base-T) Ethernet Connector for IP-Based PC Software, Host Control &amp; Third-Party Controller, shall 1x USB Type-A Audio Interface with adaptive echo cancellation (AEC): 60dB/S convergence rate; 80dB echo cancellation for Soft VC Application, GPIO Interface or batter, Supports Camera Tracking, Achieving Voice Tracking or more, Built-in automatic noise suppression (ANS): making the SNR increase upto 18db, Built-in Microphone Adaptive Feedback Cancellation (AFC), automatic gain control (AGC) : auto-gain control -6dB~+18dB; auto-balance control -12dB~+12dB, Digital Matrix, Automatic Mixing, Echo Cancellation, Noise Suppression or better, Phantom Power of + 48 VDC for Individual Input. Shall be Cascading upto 2 nos. Sampling Rate of 48 kHz or better. Frequency Response of 20Hz to 20kHz or better. It shall support Dante Interface. Support ducker, ANC, AM, and Gate Mixer. Definable UI for managing and configuring the max. of 30 units. Centralized control: easily one click to control the power of A/V equipment and switch the audio source. USB audio for soft Audio conferencing. It should be equipped with matrix function to self define the output audio sources. Centralized control via RS 232, RS 485 and UDP easily connect the third party equipment such as PTZ cameras.</p>	2		

Sr. No.	Item	Specification	Quantity / Unit	Offered Make/ Model	Compliance (Yes / No)
20	Amplifier	SITC of 500 Watts or more Mixing Amplifier. Microphone frequency response of 60Hz- 17000Hz or better. Line Frequency Response of 60 Hz-18000 Hz or better. Minimum impedance load bridged of 4 ohms per channel. 4 or more balanced microphone inputs. Up to 48V phantom power individually for four microphone inputs with On/Off. 2 or more line inputs. 1 Line output or better. Input sensitivity of $\pm 5$ mV/ 600 $\Omega$ for balanced Microphone inputs. Input sensitivity of 350mV/10k $\Omega$ for unbalanced Aux input. Output sensitivity of 1000mV/470 $\Omega$ for record output. 100V line as well as 4 to 16 ohm impedance output. THD of >0.1% at 1 KHz, 1/3 rated Power or better. Microphone input overload of fifteen db or greater. The microphone inputs shall override over other audio inputs by 30 dB attenuation via switch. Gain control of $\pm 2.5$ mV to $\pm 75$ mV@ 30dB. Cross talk of $\geq 50$ dB or better. High temperature, overload and short circuit protection. Power down after 15 minutes of no signal and comply with Energy Star Power consumption limits of < 0.5W in standby. LED at the front panel to indicate the current operation status. It shall get operated from AC as well as DC.	1		
21	Subwoofer	SITC of 500 Watts 2 way Subwoofer with Frequency Response of 40-700Hz. Waterproof, moisture-resistant, easy to maintain. Flexible installation. Class-D Amplifier, Optimized magnetic flux distribution. Power overload protection.	1		
22	Cables & connectors	Supply of HDMI Cable, Speaker Cable, Microphone cable, Audio Patch Cords, other cables & Connectors to complete the site in all respect.	As per need		
23	Onsite Installation, Programming & Labour	Programming, Installation, Testing, Configuration & User training to establish a working system	One time		

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24	Warranty/CAMC	All items should be covered under warranty of minimum 3 years and thereafter under CAMC for the subsequent 2 years.	One Lot		