# Integrated Studio Room with Acoustic & A/V Setup– Turnkey basis

## Scope of Work

## 1.    Project Overview

The objective of this project is to design, construct, and commission a fully integrated, multi-functional studio room outfitted with professional-grade acoustic treatments and state-of-the-art audio-visual equipment. The studio will be engineered to provide a controlled acoustic environment ideal for high-quality recording, mixing, live streaming, video conferencing, and end-to-end audio-video production. It will feature advanced soundproofing, optimized lighting, and seamless AV integration to meet the demands of both live and post-production workflows with customized backdrops with the help of green screen effects.

## 2.    Project Objectives:
i.     High-Quality Recording System
ii.    Live Streaming Capabilities (Minimum 2 Platform at the same time)
iii.   Customized Backdrop & Green Screen Support
iv.    Camera & Video System
v.     Teleprompter Setup specially with PTZ Camera
vi.    Professional Audio Management
vii.   Integrated Video Conferencing
viii.  Studio Lighting System
ix.    Media Management & Workflow Integration
x.     Proper Acoustic Treatment

## 3.    Project Execution:

### i.    Design & Planning:
Includes client consultation, site measurement, acoustic analysis, and layout planning focused on equipment placement, ergonomics, and cable management for optimal studio functionality & connection with UPS systems/proper cabling.

### ii.    Acoustic Treatment:
Strategic installation of bass traps, diffusers, and absorbers, along with high-density soundproofing materials. Includes wall, ceiling, and floor isolation, acoustic sealing of doors/windows, and floating floor setup if required.

### iii.    Electrical and Lighting Setup
Includes dedicated power circuits with proper grounding, surge protection, and concealed cable routing.  Light setup will feature dimmable, flicker-free LED fixtures optimized for studio use without interfering with acoustics or camera performance.

### iv.    Croma Studio Lighting
The Croma studio will be equipped with a professional lighting system specifically designed for green screen (chroma key) production. This includes soft,

flicker-free LED panel lights, key and fill lighting, and adjustable backlights to ensure even illumination across the green screen surface and eliminate shadows or hotspots. Color temperature and intensity will be adjustable to suit different shooting conditions. Lighting will be strategically placed to create a clean and consistent background for effective keying in post-production or live streaming scenarios. All fixtures will be mounted with flexibility in mind, allowing easy adjustments based on subject positioning and scene requirements.

**v. Audio & Video Integration**

This phase involves the comprehensive installation and configuration of professional-grade audio and video systems to support a wide range of studio functions. The audio setup includes studio monitors, audio interfaces, microphones (dynamic and condenser), mixers, preamps, and necessary outboard gear. Video integration includes PTZ camera systems, capture cards, video switchers, and recording units for both live and post-production workflows. The system will support HD/4K workflows and be compatible with platforms like OBS, vMix, or similar. Signal routing (HDMI/SDI/IP) will be organized for flexibility and minimal latency. All AV equipment will be calibrated for synchronization and optimal performance, with user-friendly control interfaces for seamless operation during production.

**vi. Supply and Installation:**

The supply and installation works should be completed within 50 days from the date of work order. In the event of the bidder's failure to complete the Supply and Installation with Commissioning within the stipulated time period TRAI shall withhold any payment until the completion of the contract. TRAI shall also deduct Liquidated Damages to the sum of 0.5% of the contract price of the delayed/ undelivered stores/services for delayed by week or part thereof, subject to the maximum value of the Liquidated Damages being not higher than 5% of the value of delayed stores.

**vii. Room Dimension:**

| | | |
|---|---|---|
| Length | - | 19 feet 8 inch |
| Width | - | 14 feet 5 inch |
| Height | - | 12 feet 4 inch |

## 4. Eligibility Criteria

i. Bidder's offer is liable to be rejected if they don't upload any of the certificates/documents sought in the Bid document, ATC and Corrigendum, if any.

ii. Bidder must have strong presence in Audio-Video - Croma Studio setup or similar Audio Visual work experience during the last three years with Govt. organisations/PSUs. The bidder should submit copy of work orders with completion certificates.

iii. The bidder should furnish copies of PAN & GST registration.

iv.   The bidder should have their own office in Delhi/NCR (Address proof to be submitted).

v.    Dedicated /toll Free Telephone No. for Service Support : Bidder/OEM must have Dedicated/toll Free Telephone No. for Service Support.

vi.   Service & Support Escalation Matrix For Service Support: Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

vii.  Bid Specific OEM Authorization (Bid No. & date must be mentioned) required for each AV Equipment of the Studio (Displays, Digital Video Switcher, Streaming Encoder, Capture Card, PTZ Camera Teleprompter, PTZ Camera Controller, 4K Video Recorder, 4K PTZ Camera, 17" 4K Monitor etc.) each item for better service support. Failing which bid will be liable for rejection.

viii. Installation should be provided by OEM or its authorized agency only. A declaration should be provided.

ix.   Technical compliance for the items listed in Annexure-A must be submitted along with supporting documents, including Technical Data Sheets specifying the brand, make, and model of the equipment, detailed specifications and bid-specific OEM certificates for each item, as outlined in Annexure-B.

x.    No Deviation will be accepted in technical specification of the tender, an undertaking should be provided on Letter Head of the OEM or Bidder.

xi.   Bidders are requested to submit a declaration on their letter head that all documents, declaration & undertaking submitted by them are true and correct. If the Department finds any document false at later stage, the bidder will be blacklisted by the department for the future.

xii.  For Smooth operation and proper integration of the setup, the PTZ Cameras, Digital Video Switcher and PTZ Camera Controller should be from the same OEM. The declaration of the same should be submitted along with the bid. Failing which bid will be liable for rejection.

xiii. Bidder is requested to submit the declaration on their letter head that bidder has quoted the tender price including all equipment (mentioned anywhere in the tender), Taxes, Freight, cables, connectors & Installation cost etc. TRAI will not be responsible for any loss of the bidder/Seller at any stage of the work and will not entertain for any claim by the bidder.

xiv.  Bidders are is requested to ensure the site visit for better understanding of the work and requirements of TRAI.  The bidders are required to submit "Site Survey Certificate" issued by TRAI along with the bid failing which bid will be liable for rejection. Interested bidder must apply for visiting TRAI Hq. within 10 working days from the date of release of the bid. Interested bidders are required to send their

request for site visit to dait@trai.gov.in or to-itdivision.trai@nic.in with the subject **"Site Visit - Integrated Studio Room with Acoustic & A/V Setup in TRAI"**.

**5. Testing & Commissioning**
The testing and commissioning, involve a structured process to ensure the system is fully functional, reliable, and user-friendly. Initially, all equipment is tested individually to verify functionality, correct firmware, cabling, and network settings. During commissioning, the full system is integrated and tested end-to-end, including signal flow, control systems, automation, and redundancy checks, with all results and configurations documented.

## General Terms and Conditions

**6.     Presentation of Product/Solution & Specification :** Technical evaluation shall include presentation of the proposed project/Solution & Technical Specification of the product proposed by the bidder at TRAI premises to verify the functionalities and specifications of the product quoted.  The bidder shall make arrangements for the presentation before the Technical Evaluation Committee within 7 days from the date of receipt of email requisition from TRAI.

**7.     Warranty:**  The successful bidder should furnish an all-inclusive comprehensive on-site warranty of Twenty Four Months (Two years) for all equipment / appliances and all components supplied to TRAI from the date of installation whichever is later for any manufacturing defects during that period.

**8.     Aftersales Support**:   The successful bidder has to respond to breakdown call within 24 hours of placement of the call in all days including holidays within the warranty period. The call will be placed through phone/email.  In case of major breakdown, the repair/rectification should be done within 48 hours.  In case replacement or repair of the items is to be undertaken at the bidders office, the same should be done within a week after providing standby equipment on the next working day.

**9.     Penalty:**
The penalty to be imposed on the successful bidder shall as follows:

| Sl. No. | Description | Penalty Amount |
|---|---|---|
| 1. | No response to breakdown within 24 hours | Rs.500/- per day |
| 2. | Repair/rectification not undertaken within 48 hours | Rs.1,000/- per day |
| 3. | Non-provision of stand-by equipment (for items taken for repair) | Rs.1000/- per day |

***The maximum limit of all the penalties taken together shall be limited to ten per cent (10%) of the contract amount.***

If the bidder fails to rectify the faults of the system, even after the maximum limit of penalty of ten per cent of the contract amount is exceeded, TRAI, at its

discretion, may terminate the contract and get faults rectified or the faulty parts replaced through a third party and recover the cost of such repair or cost of replacement of the faulty parts and other expenses, if any, incurred by it for getting the faults rectified from the bidder either from the pending bills of the bidder or by encashment of the performance bank guarantee, as the case may be.

**10.  Training:**  The successful bidder shall provide comprehensive training sessions after installation to the TRAI officials.  The objective is to equip them with the skills required for the seamless operation of the equipment.  Training should be conducted on-site at TRAI premises without any additional charges.  The e-learning material in the form of small videos/PowerPoint presentations/training material in PDF form, shall also be made available to TRAI by the bidder.

**11.  Documentation:** The agency shall furnish the warranty documents and manuals of all the equipment supplied/installed in Croma Studio.

**12.  Payment Terms:** Payment will be released after satisfactory Supply, Installation and Testing and on submission of bill and satisfactory certification of work done as follows:-

| | | | |
|---|---|---|---|
| i. | Supply and installation | - | 90% of the contract value. |
| ii. | Completion of warranty period | - | 10% of the contract value. |

The payment will be made subject to the completion of work to the satisfaction of TRAI and deduction of penalty, if any.  TDS etc., as applicable, will be deducted at the time of release of payment.  No payment will be made in advance and no extra amount will be paid for any additional work that the bidder may have carried out.

**13.  Manpower: Studio AV Technician / Operator (For initial 1 year)**

**(i) Core Responsibilities:** To operate cameras, audio, lighting, and switching equipment, manage live streaming or recording, handle graphics, playback, and possibly teleprompting, ensure all systems function smoothly, including IT/network support

**(ii) Required Qualifications:**

Bachelor's degree 3–5+ years of hands-on experience in multi-role AV environments with Media Production, Audio-Visual operation and broadcasting etc.

**Strong skills in:** Camera operation and framing, Audio mixing and microphone setup, Video switching, Lighting adjustment, Streaming platforms (YouTube Live, Zoom, vMix, etc.) and basic troubleshooting of IT/network issues etc.

**Tools Proficiency:** OBS Studio, vMix, ATEM Mini/Extreme, Adobe Premiere/After Effects**,** Audio mixers, Studio Cameras, Lighting etc.

**(iii)**  The technical manpower shall required to be present in TRAI HQ on all working days (9.30 AM to 6.00 PM) and required on Saturday & Sunday in case of urgency.

**14.** Bidder's offer is liable to be rejected if they don't upload any of the certificates/documents sought in the Bid document, ATC and Corrigendum if any.

| | | Integrated Studio Works | | | |
|---|---|---|---|---|---|
| S.No. | Item | Description/Specification | UoM | QTY | Makes |
| 1 | 65" Display | SITC of 65" 4k, UHD Professional Signedge Display with 400 NITS, 24*7 ,Built in SOC/ Media Player with Quad Core Processor, Built in Open Platform Android 11, With Built in Bluetooth, 2X HDMI, Audio Input Audio Output, Built in Speaker(10W x 2) ;Including mounting bracket, Built-in Chromecast , HDMI Arc, Dolby Digtial audio, The built-in SOC is powered by Google's Android Platform, HDMI-CEC device linking supported, 2 USB(2.0), 3*HDMI(2.0 Side), Headphone Out, 1 *RJ 45, SPDIF out, Built In 2.4 GHZ Wifi, With 3 years on Site Warranty | Nos | 2 | Sony/ Samsung /Panasonic |
| 2 | 43" Confidence Monitor | SITC of 43" 4k, UHD Commercial Display with 400 NITS, 24*7 ,Built in SOC/ Media Player with Quad Core Processor 2.4 GHZ Wifi, CPU Built in With Cortex-A55*4, 1.1 GHz Processer, Built in Google Certified Android 11 Operating System, 2.0GB, DDR3 2133Mhz and Memory Flash 16GB EMMC, Inbuilt OTT App,With Built in Bluetooth, Audio Input & Audio Output, Built in Speaker(10W x 2), Built-in Chromecast , Basic Hotel Model Function ,HDMI Arc Function, Dolby Digital Audio, HDMI-CEC device linking supported, 2 USB(2.0) x 1 , USB 3.0 x 1, 3*HDMI(2.0 Side),HDR10/HLG, Headphone Out, 1 | Nos | 1 | Sony/ Samsung /Panasonic |

| | | | | | |
|---|---|---|---|---|---|
| | | *RJ 45, SPDIF out, With 3 years on Site Warranty including High quality Floor mount Movable Stand with 4 Lockable Wheel etc | | | |
| 3 | Digital Video Switcher for Studio | SITC of 4k Video Switcher with Minimum 12 button hardware panel & built-in Title Creator, Minimum 8 x 12G SDI, 4 x HDMI (with or without converter) Input, Minimum 4 x 12G SDI, 3 x HDMI output. Supporting Input format: 3840x2160p: 60/59.94/50/30/29.97/25, 1080p: 60/59.94/50/30/29.97/25, 1080i: 60/59.94/50, Output format: 3840x2160p: 60/59.94/50/30/29.97/25, 1080p: 60/59.94/50/30/29.97/25, 1080i: 60/59.94/50, Video Processing: SDI: 4:2:2 10-bit, HDMI: YUV 4:2:2 10-bit, RGB: 4:4:4 8/10-bit, Input Routable / Crosspoint: YES, All output assignable: Multiview, PGM, PVW, PGM+DSK, Clean PGM, Clean PVW, Input 1-12, Supporting Down-converted Output, Built-in Multi-view Monitoring Out: HDMI & SDI assignable, Analogue Audio Input: 4 x Analogue XLR, Analogue Audio Output: 2 x Analogue XLR, Digital Embedded Audio Support: Input 4 channels, Output 4 channels, Audio Delay Calibration: Up to 16 fields or 8 frames per channel, Chromakey: 4, USK: 4x Keyer support Chromakey/ Linear/ Luma Key, DSK: 2x DSK support Lumakey & Linear key (Key / Fill), Picture in Picture: 2, Logo Insertion: 2, Still Store: 250, Effects: FTB, Cut, 32 Wipe with border, Transition Preview: Full transitions preview, Tally Output: 1x D-sub 25pin, dual color, PC Remote Control: DVIP (Ethernet), Built-in Audio Mixer: Yes, Special Features: 5" Touchscreen Display, Power: Main Unit: DC 12V, 126W, Control Unit: DC 12V 17.3W | Nos | 1 | Sony / Canon/Ross/ Data video |

| | | | | | |
|---|---|---|---|---|---|
| 4 | Dual Streaming Encoder | SITC of H.264 Dual Streaming Encoder with SD Card recorder, H.264/AVC High Profile Level 4.1, Audio Input:-1 x HDMI embedded audio, (Audio depends on the source/ both stereo and mono supported) 1 x SDI embedded audio, 1 × RCA (audio level calibration: +10/+12dB ~ -6dB), 2 x XLR (audio level calibration: +10/+12dB ~ -6dB), Mix (Embedded + RCA+XLR), Video Input:- HDMI x1, SDI x1, Video Bitrate:- Record Only: Up to 16Mbps (1080p50/60 Stream Only: Up to 10Mbps (1080p50/60), Rec and Stream: Up to 36Mbps (1080p50/60) (dual stream), Streaming Protocols:- TS over TCP/UDP (unicast & multicast) RTSP over HTTP/TCP/UDP (RTSP Elementary Stream) RTMP/RTMPS(Publish) SRT | Nos | 1 | Data video / Hivision /Harmonic |
| 5 | SDI to Capture Card | SITC of SDI to USB 3.0 Capture Box with Input Video Bandwidth 150MHz (pixel clock rate) and Output Video Bandwidth Up to 350Mbps (USB), Capture Video Format YUY2 (USB3.0), MJPG (USB2.0/3.0) | Nos | 1 | Data video / AJA / Lumens |
| 6 | PTZ Camera Teleprompter | SITC of PTZ Camera Teleprompter 15" monitor with integrated dvPrompter Plus software, Camera-Mount Interface Adjustable Lift, Multi-language Support, LCD Native Resolution 1024x768, LCD Brightness 350 Nit, Monitoring and control via LAN etc. | Nos | 1 | Data video / Cue script/ prompter people |
| 7 | PTZ Camera Controller | SITC of PTZ Camera Controller, can controll up 4 camera or more, Build-in Control Panel with Monochrome display, Input/Output RS-422 (RJ-45 Connector) x 4 etc. | Nos | 1 | Data video / Sony / Canon |

| | | | | | |
|---|---|---|---|---|---|
| 8 | 4K Video Recorder for Studio | SITC of ProRes 4K Video Recorder-Desktop, Video Standard UHD & HD, with Multi-channel Recording upto 4-CH HD or better, Video Format: 2160p23.98/24/25/ 29.97/30/50/59.94/60Hz, 1080p 23.98/24/25/29.97/30/50/59.94/60Hz, 1080i 50/59.94/60Hz, 720p 50/59.94/60Hz, Supported Video Input Signal: 1x 3G/12G-SDI, 3x 3G-SDI, 1x HDMI 2.0, 1x HDMI 1.4, Video Output: 1x 3G/12G-SDI, 1x HDMI 2.0, 3x HDMI 1.4, Video Recording Bit Rate / Color Sampling: ProRes 422 HQ, ProRes 422, ProRes 422 LT, ProRes 422 Proxy, Preview display 5" Touch LCD, External Control RS-232/422 (Dsub 9pin), DVIP (Ethernet), Recorded File Format QuickTime .MOV etc. | Nos | 1 | Data video / Lumens / AJA |
| 9 | 4K PTZ Studio Camera | SITC of 12x 4K PTZ Camera with 12x Optical Zoom, 16x Digital Zoom or better Image Sensor 1/2.5" CMOS, Effective Pixels (approx.) 8.51Mega Pixels, S/N Ratio ≥55dB, Min. Illumination 0.5 Lux @ (F1.8, AGC ON) or better, Electronic Shutter 1/30s ~ 1/10000s, White Balance Auto, Indoor, Outdoor, OnePush, Manual, VAR, with AGC / Gain Control, with Mirror / Flip Image, Panning / Tilting Range Pan: 300° Tilt: +130° to -15° with 255 Preset, Focal Length 12x, f = 4.4mm ~ 52.8mm, F1.8 ~ F2.6, Field of View (Horizontal, Wide) 71°, Video Output: HDMI 2.0 x1, 3G-SDI x1, 10/100/1000M RJ45 x1, Control Protocol: Pelco-D, Pelco-P, VISCA, VISCA over IP, NDI, DVIP, Remote Control Interface: IR, Web GUI, RS-422, DVIP, NDI, Streaming Protocols: RTSP, RTMP(S), Onvif, Multicast, SRT etc. | Nos | 3 | Data video / Sony / Canon |
| 10 | Tripod Stand | SITC of Tripod with Playload upto 10KG for Teleprompter etc. | Nos | 1 | Manfrotto / Miliboo/ Technitia |

| | | | | | |
|---|---|---|---|---|---|
| | For Telepromptor | | | | |
| 11 | Tripod Stand for PTZ Camera | SITC of Tripod with Playload upto 7KG etc. | Nos | 2 | Manfrotto / Miliboo/ Technitia |
| 12 | Wireless Handheld Microphone | SITC of Digital UHF Wireless Handheld Microphone System, Dynamic, 24 bit Digital Audio, Dynamic Range - 118 dB or better, Frequency Response : 20 to 20,000 Hz, Polar Pattern : Cardioid, Channels – Upto 30 simultaneous Channels per frequency bands, Switching Bandwidth - 42 MHz or better, Frequency Auto Scan Functionality, Range – 300 ft or more, RF Transmitter Output : 10 mW, Should have LAN port for monitoring, Should include rechargeable batteries and charger, Battery Life : 8 hours or more etc all complete | Nos | 1 | Sennheiser/Shure /Revolabs |
| 13 | Wireless Lapel Microphone | SITC of Digital UHF Wireless Lapel Microphone System, Condenser, 24 bit Digital Audio, Dynamic Range - 118 dB or better, Frequency Response : 20 to 20,000 Hz, Polar Pattern : Omnidirectional, Channels – Upto 30 simultaneous Channels per frequency bands, Switching Bandwidth - 42 MHz or better, Frequency Auto Scan Functionality, Range – 300 ft or more, RF Transmitter Output : 10 mW, Should have LAN port for monitoring, Should include rechargeable batteries and charger, Battery Life : 8 hours or more etc. all complete | Nos | 4 | Sennheiser/Shure /Revolabs |
| 14 | Audio Mixer with USB Audio Interface | SITC of Multipurpose Mixer for Live Sound and Recording with 8 Mic/Line inputs with XLR and TRS Jack Sockets, 2 In / 2 Out USB Audio Interface, Onboard Digital FX, 2 Stereo Inputs with TRS jack sockets and 1 with RCA, 2 Hi-Z Instrument Inputs, XLR main outputs with Insert points, 3-band EQ with sweep able mid, Premium 60mm faders | Nos | 1 | Allen & Heath / QSC / Digico |

| | | | | | |
|---|---|---|---|---|---|
| 15 | Studio Podium | SITC of Wooden Podium with two 18" Gooseneck Microphone with sufficient height and storage option, Side tray to place the laptop etc. | Nos | 1 | Custom |
| 16 | 4K Studio Monitor | SITC of 17-inch 4K UHD LCD monitor which comes with an UHD 3840 x 2160px IPS panel, 178 degrees wide viewing angle and a brightness of 300 cd/m2 and 1000:1 contrast ratio 12G-SDI and HDMI 2.0 inputs with loop-through outputs, supporting up to DCI 4K and Ultra HD signals on both input and output etc all required | Nos | 1 | Technitia / Datavideo / NEC |
| 17 | Studio Light 100W | SITC of 100W LED Soft Panel Light 5600K colour temperature. CRI,TLCI and R9 value above 95. Uniform shadow less output, No heat from light, No UV radiation, control mode:Manual and DMX control mode through 5pin. Extreme soft illumination with diffuser. 0 ~ 100% linear dimming. Black powder coated fabricated housing with normal yoke but without accessories | Nos | 5 | Technitia / Soft panel / Leksa |
| 18 | 4-leaf barndoor | SITC of MS fabricated 4-leaf barndoor for 100W LED Soft Panel Light | Nos | 4 | Technitia / Soft panel / Leksa |
| 19 | Studio Light 60W | SITC of 60W Maxi lights complete with 2700K~5700K CCT 60W Chip On Board LED Lamp source, CCT tunable, Manual control & Manual control & DmX 100% to 0%, CRI-98, TLCI-99 & R9 value 96 throughout the spectrum & while dimming. LED Display for CCT & Dimming Level, Black finish housing, IP20 protection with Barndoor, Diffuser. | Nos | 5 | Technitia / Soft panel / Leksa |
| 20 | Studio Light Bar | SITC of Light Bar for Ceiling mount of Studio Lights customized as per site | Nos | 2 | Custom |
| 21 | Studio Light Fixture | SITC of Light fixture mounting clamp customized for suspending on fixed bars on stage made up of Aluminium or MS material complete with black powder coating matt black finish. | Nos | 10 | Technitia / Soft panel / Leksa |
| 22 | Studio Light Fixture | SITC of Light Fixture dual safety chain made up of GI wire rope bundled and | Nos | 10 | Technitia / Soft panel / Leksa |

| | | twisted together having load bearing capacity above 200 Kgs, Sleve on the rope. | | | |
|---|---|---|---|---|---|
| 23 | Cables & Connectors | SITC of Cables, Connectors, Snake, Patch panel (Including HDMI, USB Extension Cable, Microphone and Speaker Cables) | Set | 1 | Technitia/Krystal/Belden |
| 24 | AV Equipment Rack | SITC of 16U, Equipment Rack, with Front & Side doors, 4 No Fan Assembly, on Top of the Rack, 4 Caster wheels, 2 no Shelfs to mount the equipments which are not rack mounted, 8X2, 5/6 Amp. Power Distribution Unit, Cable Manager & Sufficient Rack hardwares etc all complete | Nos | 1 | Technitia/Valrack/Netrack |
| 25 | Chroma Screen & Backdrop | SITC of Fix Green Screen Chroma Setup for Studio for green screen effect with wrinkle free setup and with portable white & green Back drop with tripod stand etc. all complete | Nos | 1 | Custom |
| 26 | AV Accessories | SITC of 2 Powered Speaker for control room with walkie talkie setup with earset option for 3 people for the communication among control room and camera man & speaker etc all complete | Nos | 1 | Various |
| 27 | Online UPS | SITC of 6KVA Online UPS with 15-20 minutes backup on full load & 30-40 minutes back up on 50% load with all required batteries, racks, connecting cables etc all complete | Nos | 1 | APC/Luminous/Vertiv/ Microtek |
| 28 | Studio Technician | Manpower /Operator for the setup should be provided by the bidder for 1 year, Person should be expert in Chorma Editing, Management of Studio Setup, Lighting, Camera Setup and other Audio-Visual Setup as required by the customer. Qualification as per ATC of the tender. | Nos | 1 | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1 | Acoustic Work | False Ceiling ( Fabric finish ) N.R.C. (Noise reduction coefficient)- 0.9 P/F Acoustic False ceiling with Polyester base stretch  Fabric & upvc gripper of 12mm x 20 mm wall system for the all side wall of Studio, from the back wall with 50 mm thick (1000 GSM) polyester wedding  insulation with pre laminated glass tissue. Upvc profile fixed with 12 mm (ISI) Mdf backing over G.I. frame work. | SQFT. | 300 | Cineview / Armstrong / Anutone |
| 2 | Acoustic Work | Side Walls ( Absorption wall with sound diffusion) P/F Acoustic wall lining with Fabric & pvc gripper system for the both side wall of media room, from the back wall with 50mm thick (1200 GSM)  polyester wedding insulation with pre laminated tissue paper supported in GI framework 1 x 48mm both ways vertical GI studs as per Saint gobain standerd. | SQFT. | 500 | Cineview / Armstrong / Anutone |
| 3 | Acoustic Work | Back Wall & Screen wall ( Absorption & Reflection for Low Frequencies) P/F Acoustic wall lining with MDF board and  fabric stretched in back wall filled with 50 mm thick (1400) GSM polyester wadding & acoustic board over  G.I. framework. | SQFT. | 400 | Cineview / Armstrong / Anutone |
| 4 | Carpet | P/F Loop pile carpet with acoustic 6 mm underlay. | SQFT. | 300 | F & F / Blossom / Bianca |
| 5 | Door | Acoustic door with door frame - 65 mm | SQFT. | 32 | Cineview / Armstrong / Anutone |

 * All equipment/solution must be provided with minimum number of OEMs, to avoid any future malfunctioning of the systems.

## OEM Authorization (MAF) Declaration

Bid specific MAF / OEM Authorizations are mandatory for below listed items;

| Sr. No. | Item Name | Offered Make | MAF Submitted Yes/No |
|---------|-----------|--------------|----------------------|
| 1 | 65" Display | | |
| 2 | 43" Confidence Monitor | | |
| 3 | 4K Digital Video Switcher for Studio | | |
| 4 | Dual Streaming Encoder | | |
| 5 | SDI to USB Capture Card | | |
| 6 | PTZ Camera Teleprompter | | |
| 7 | PTZ Camera Controller | | |
| 8 | 4K Video Recorder for Studio | | |
| 9 | 4K PTZ Studio Camera | | |
| 10 | 4K Studio Monitor | | |
| 11 | Studio Lights | | |

Note: Bid Specific OEM Authorization (Bid No. & date must be mentioned) required for each AV Equipment of the for better service support. Failing which bid will be liable for rejection.