## <u>Corrigendum-I</u> ANNEXURE II Technical Specifications

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		Specifications for Indoor LED Videowall (136")				
	Item 1A: Indoor LED Videowa					
	Parameter	Specifications				
	Display Size (W x H)	3000mm x 1650mm or more				
	Pixel Pitch	1.56mm or better (Lower is considered better)				
	Resolution	1920 X 1080 or higher				
	LED Configuration	SMD 3 in 1				
· –	Pixel Density	4,00,000 Pix / Sq-Mtr or More				
	Half Gain Horizontal / Vertical Viewing Angle	H 140 deg / V 140 deg or better				
	Refresh Rate	≥ 3840 Hz or better				
	Contrast Ratio	10000:1 or better				
	Gray Scale Processing	16 Bit or better				
	Dimming Capability	256 levels				
	Cabinet Material	Die Cast Aluminium / Carbon Fibre / Magnesium Alloy				
	Inter Cabinet Connection	Cable Less				
	Cabinet Aspect Ratio	16:09				
	Weight kg/ m2	25 kg/m2 or less				
	Brightness (calibrated)	600 cd/m <sup>2</sup> or higher				
	Maximum Power Consumption (during LED startup)	550 w/sqm or lower				
	Average Power Consumption	220 w/sqm or lower				
	Power Input	100 ~ 240 VAC				
1,2	Temp Range	0 to +50 Degrees C or better				
	IP Level	IP30 or better				
	LED Video Wall Warranty	5 Years				
	Compliance Certification on	CE, FCC, BIS; Certifications are mandatory				
	OEM Name					
	Preferred Make	Barco, Xtreme Media, Christie,				
		Samsung, LG				
	Item 1B: LED Videowall Co	ontroller				
	Parameter	Specification				
	Maximum Pixel Loading Capacity	26 million or More				
	LED Output	16 x Ethernet				
	Input	5 x HDMI (At least 1 input should support 4K input resolution)				
	input	1 x DP (Input should support 4K input resolution)				
		1 x Gigabit Ethernet,				
	Data Interface	2 x USB				
		2 X COM Port				
	Operating Temperature	0°C ~ 45°C				
-	Operating Temperature Storage Temperature	0°C ~ 45°C -10°C~60°C				

Storage Humidity	0%~95%
Rated Voltage	AC220V±10%50/61Hz
Maximum Power Consumption	210 W or less
The LED Videowall, the LED Videowall Controller and the Software must be from the same OEM for ease of integration	
Floor Stand for 136" Active LED Video Wall	

Standard Podium	Engineered Wooden Make, Item dimensions (L x W x H) 2 feet x 1.5 feet x 4 - 4.2 feet - Qty		

		Video Co	onferencing Solution	
Sr. No.	Description	Make	Specification	Qty
S.No. 4,5	20x Optical PTZ Camera with All Accessories	LUMENS /CRESTRON / EQUIVALENT	Supply Installation Testing and commissioning of 20x Optical Zoom PTZ Camera supporting minimum below parameters:	As per BOQ
			1) Minium Optical Zoom: 20x.	
			2)Focal Length: F=5.2-94 mm.	
			3)Field of View: Horizontal: 56° & Vertical: 40°	
			4)Image Sensor: Minimum 1/2.8 Sony CMOS Sensor or better5) Video output resolution: Minimum 1080p60.	
			6)Video Outputs: 3G-SDI, HDMI, USB, ONVIF, RTSP, NDI	
			7)Shutter Speed: 1/50-1/10,000 sec	
			8)Minimum Illumination: 20 lux	
			9)Control: VISCA/TCP, VISCA/UDP, PELCO-D, PELCO-P, ONVIE	
			10) Minimum 1x RS-485 port for controlling.	
			(11) Visibility Indicator: Should have bicolor LED, to show	
			device activated or standby mode	
			12) Camera mount to be supplied with the hardware.	
			13) Compliance: CE, FCC, IC (Additional BIS to be shared if applicable)	
			Camera & Camera switching solution should be from one	
			manufacturer only, to avoid any compatibility issue and	
			meet the room functional as per requirement and user	
			requirement. OEM / SI / Vendor will need to show the camera	
			switching solution for technical evaluation, either	
			virtually over soft calling or on site.	
S.No.6	Camera Switcher with All Accessories	LUMENS /CRESTRON	<ol> <li>Supply Installation Testing and commissioning of Voice-Activated, Multi-Camera Switching Solution for</li> </ol>	As
	with All Accessories	/ EQUIVALENT	large and complex area with broadcast-style experience.	per BOC
		, - 40	2)Camera switcher should be able to get the location of	200
			the active speaking participant in the room from Mic/DSP	
			and automatically trigger the camera switching and	
			movement without the need of control system.	
			3)Switching between the people sitting inside the room	
			must be clean, clear shots without blur image or blackout	
			to provides a more engaging experience for remote participants.	
			4)Camera switcher should support multiple layout	
			scenarios including the conversation mode thereby	
			showing two active speakers simultaneously to the far	
			side based on the room requirement and without the	
			need for re-programming.	

		5)Should be able to combine multiple camera sources, superimpose multiple titles and also able to add logos, titles, custom graphics background.	
1x4 HDBT Splitter with All Accessories	EXTRON / CRESTRON/ EQUIVALENT	<ul> <li>6)Should have proper algorithm built-in which can follow the conversation and avoiding excessive camera switching.</li> <li>7)Camera switching solution must also support control via control system for auto-switching and change room configurations and layouts.</li> <li>8) Should have tool which provides the ability to design and configure spaces and simulate to help choose the best position for a variety of cameras and microphones within a room before deployment. Same file to be uploaded on camera switcher for automatic configuration.</li> <li>9) Ports 2x RJ-45 Gigabit Ethernet, Video inputs 3x HD-SDI Inputs &amp; 12x NDI Inputs, Video outputs at 1x HD-SDI.</li> <li>10) Should be compatible and tested with major DSP &amp; Mics OEM's.</li> <li>11) Should have minimum 2x Mini DisplayPort™ output for setup and maintenance.</li> <li>Camera &amp; Camera switching solution should be from one manufacturer only, to avoid any compatibility issue and meet the room functional as per requirement and user requirement.</li> <li>OEM / SI / Vendor will need to show the camera switching solution for technical evaluation, either virtually over soft calling or on site.</li> <li>Supply, installation, testing and commissioning of 1:4 4K HDMI® to HDBaseT® Splitter.</li> <li>Should have 1xHDMI® signal to feed four separate HDBaseT® receivers (up-to 100m) &amp; 1x HDMI output as well to connect to a local display.</li> </ul>	As per BOQ
		HDBaseT devices. Should be able to handles Dolby <sup>®</sup> TrueHD, Dolby Atmos <sup>®</sup> , DTS-HD <sup>®</sup> , DTS:X <sup>®</sup> , and uncompressed 7.1 linear PCM audio. Should be CE compliant.	
Wireless Presenter with All Accessories	CRESTRON	<ul> <li>compliant.</li> <li>1)Supply Installation Testing and commissioning of secured 4K wireless presentation device having 1x HDMI Input, 1xHDMI output &amp; stereo line-level audio output.</li> <li>2)User should be able to present content via OS Supported Apple iOS, Android, Windows 8.1 or higher, Windows 10, macOS, Chrome OS, Miracast™ screen mirroring technology.</li> <li>3)Able to view minimum four content side by side on the single screen and Device should have HDMI Output port supporting HDCP 2.2, EDID, CEC &amp; multiple USB port for connecting peripherals.</li> <li>4)Should have ethernet port supporting 100/1000 Mbps, TCP/IP, UDP/IP, DHCP, SSL, SSH, IEEE 802.1x, Active Directory authentication, HTTPS.</li> <li>5)Standard network security protocols, including 802.1x network access control, AES content encryption, to protect privacy and ensure compliance with your organization's IT policies.</li> <li>6)Video out resolution up-to 4k</li> <li>7)Device should have 1x RS-232 bidirectional &amp; 1x IR port</li> </ul>	As per BOQ
	with All Accessories Wireless Presenter	with All Accessories CRESTRON/ EQUIVALENT	Intervent         Extransition for a variety of cameras and microphones within a room before deployment. Same file to be uploaded on camera switcher for automatic configuration.           9) Ports 2x RJ-45 Gigabit Ethernet, Video inputs 3x HD-SDI Inputs & 12x NDI Inputs, Video outputs at 1x HD-SDI.           10) Should be compatible and tested with major DSP & Mics OEM's.           11) Should have minimum 2x Mini DisplayPort** output for setup and maintenance.           Camera & Camera switching solution should be from one manufacture only, to avoid any compatibility issue and meet the room functional as per requirement and user requirement.           OEM / SI / Vendor will need to show the camera switching solution for technical evaluation, either virtually over soft calling or on site.           Ix4 HDBT Splitter         EXTRON / CRESTRON/           EQUIVALENT         Stupply, installation, testing and commissioning of 1:4 4K HDMI*s to HDBaseT* Splitter.           Should have taxingabit Ethernet port to provide a single-point LAN connection for all connected receivers and HDBaseT* receivers (up-to 100m) & 1x HDMI output as 'well to connect to a local display.           Should have Laxingabit Ethernet port to provide a single-point LAN connection for all connected receivers and HDBaseT devices. Should be able to handles Dolby* TrueHO, Dolby Atmos, DTS-HO*, DTS:X*, and uncompressed 7.1 linear PCM audio. Should be CE compliant.           Wireless Presenter with All Accessories         CRESTRON         Supply. Installation Testing and commissioning of secured 4A wireless presentation device having 1x HDMI input, 1xHDMI output & streeo line-level audio output.

II Switcher I Accessories	EXTRON / CRESTRON/ EQUIVALENT	<ul> <li>provisioning, IEEE 802.3at compliant.</li> <li>10)Should comply to CE, UL, FCC, ROHS. (Additional BIS to be shared if applicable)</li> <li>11) Should be Microsoft Teams certified Hardware</li> <li>1) Supply Installation Testing and commissioning of 8x4 matrix HDMI AV Switcher.</li> <li>2) Should have eight HDMI® inputs, four HDMI outputs</li> </ul>	As per proposed solution
		provisioning, IEEE 802.3at compliant. 10)Should comply to CE, UL, FCC, ROHS. (Additional BIS to be shared if applicable)	
		The mansfel motocolly, password login, mm s secure	
		functionality. 9) It should support IEEE 802.1X, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), password login, HTTPS secure	
		cables, converters, POE, additional accessories, and components to be included to meet the said	
		built in for users to use their own UC conference platform from laptop without rebooting the device.	
		thermostats, and other equipment used in addition with the control system. It should also have USB-C port and	
		7) The touch screen offered with this package should be able to operate Microsoft Teams Room call Control	As per I
		USB 2.0 and 3.0 supported multiple ports for accessories	propose
		speaker phone) 6) Engine should have 2 x output to be connected to 2	per proposed solution
		choice of displays, cameras, speakers, microphones,	uo
		controlling the Microsoft Team calls and flexible room controls.	
		<ul><li>10" Tabletop touch screen.</li><li>4) Wall mount touch interface should be powered over ethernet for 24x7 use and which will be used for</li></ul>	
		support Windows <sup>®</sup> 10 IoT Edition OS, 100/1000 Mbps Ethernet connectivity, minimum dual displays output and	
		native Zoom room system if the platform of user changes.	
Codec		communications platform. 2) It is preferrable to convert native Teams room to	
soft Teams	MS	shared if applicable) 1) SITC of customizable video conference room solution	
		USB dongle and wireless presenter hardware.	
		where one will be used for sharing content and second button to enable the wireless conferencing feature when required.	
		without running OEM app, without plugin, for external guests. 10)Supplied 1xUSB dongle must have 2xbuttons on it.	
		data sharing. 9)Should be shipped with 1x USB Dongle for wireless 4k content sharing, without downloading any application,	
r	n Certified	n Certified	<ul> <li>9)Should be shipped with 1x USB Dongle for wireless 4k content sharing, without downloading any application, without running OEM app, without plugin, for external guests.</li> <li>10)Supplied 1xUSB dongle must have 2xbuttons on it, where one will be used for sharing content and second button to enable the wireless conferencing feature when required.</li> <li>11)Should support Wi-fi 6 communication between 1x USB dongle and wireless presenter hardware.</li> <li>12)Should comply to IC, CE, FCC (Additional BIS to be shared if applicable)</li> <li>soft Teams</li> <li>MS</li> <li>1) SITC of customizable video conference room solution for use with the MICROSOFT TEAM Rooms intelligent communications platform.</li> <li>2) It is preferrable to convert native Teams room to native Zoom room system if the platform of user changes.</li> <li>3) The collaboration hardware / codec provided should support Windows* 10 IoT Edition OS, 100/1000 Mbps Ethernet connectivity, minimum dual displays output and 10" Tabletop touch sereen.</li> <li>4) Wall mount buch interface should be powered over ethernet for 24x7 use and which will be used for controling the Microsoft Team calls and flexible room controls.</li> <li>5) This hardware should enable integration with your choice of displays, cameras, speakers, microphones, mixes, switchers, and audio-conferencing interface (or speaker phone)</li> <li>6) Engine should have 2 x output to be connected to 2 displays, 1 Input for sharing wired content during the call, USB 2.0 and 3.0 supported multiple ports for accessories connectivity like camera, DSP, speakerphone etc.</li> <li>7) The touch screen offered with this package should be able to operate Microsoft Team schow class thermostats, and other equipment used in addition with the control system. It should also have US-C port and USB-A port for BYOD / BYOM / USB Passthrough feature built in for users to use their own UC conference platform from laptop without rebooting the device.</li> <li>8) Package should be provided with necessa</li></ul>

			<ul> <li>4) Should support audio signals Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS-ES, DTS HD High Res, DTS-HD Master Audio &amp; LPCM up to 8 channels.</li> <li>5) Should support HDCP 2.3 content protection.</li> <li>6) Should have ethernet port supporting 1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP, Web browser setup.</li> <li>7) Should support EDID management &amp; third-party device control over CEC.</li> <li>8) Should support security features and protocols, Active Directory<sup>®</sup> credential management, 802.1X authentication, TLS, SSH, and HTTPS. 9) Should have minimum1x USB port for firmware, configuration management and to power a USB powered device up-to 5 V 500 mA power. 10) Should be controllable over ethernet 11) Should comply to CE, IC, RoHS, FCC.</li> </ul>	
S. No.25	HDMI Tx	EXTRON / CRESTRON/ WYRESTORM/ EQUIVALENT	<ol> <li>Supply Installation Testing and commissioning of Transmitter for HDMI Signal extension up-to 40m.</li> <li>Should support video signals HDR10+, Dolby Vision, Deep Color and 4096x2160 @60 4:4:4 resolution.</li> <li>Should support audio signals Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS-ES, DTS HD High Res, DTS-HD Master Audio &amp; LPCM up to 8 channels.</li> <li>Should support HDCP 2.3 content protection.</li> <li>Should have 1x HDMI Input, 1x RJ45 output.</li> <li>Should comply to CE, IC, FCC.</li> </ol>	As per proposed solution
S. No.25	HDMI Rx	EXTRON / CRESTRON/ WYRESTORM/ EQUIVALENT	<ol> <li>Supply Installation Testing and commissioning of Receiver for HDMI Signal extension up-to 40m.</li> <li>Should support video signals HDR10+, Dolby Vision, Deep Color and 4096x2160 @60 4:4:4 resolution.</li> <li>Should support audio signals Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS-ES, DTS HD High Res, DTS-HD Master Audio &amp; LPCM up to 8 channels.</li> <li>Should support HDCP 2.3 content protection.</li> <li>Should have 1x HDMI Output, 1x RJ45 input.</li> <li>Should pass EDID and CEC.</li> <li>Should comply to CE, IC, FCC.</li> </ol>	As per proposed solution
S. No.11 S. No. 11	Cable Type 2 Cable Type 1	CRESTRON / EQUIVALENT CRESTRON/ EQUIVALENT	Supply, installation, testing and commissioning of premium USB-A Male to USB-C® Male cable of 12 ft. Should be USB-IF certified & CE compliance. Supply, installation, testing and commissioning of premium USB-C® Male to USB-C Male cable. Should support USB 3.2 Gen 1 (5 Gbps), DisplayPort™ Alt Mode, 100 W, 6 ft. Should be USB-IF certified & CE compliance.	solution
S. No. 12	HDMI Rx Type 2	EXTRON / CRESTRON/ WYRESTORM/	<ol> <li>Supply, installation, testing and commissioning of HDBaseT certified receiver and display controller.</li> <li>Should have 1x HDBT Input, 1x HDMI output.</li> <li>Should support resolution 4096x2160 @60 4:4:4, HDR10, Deep Color, 3D. 4) HDCP 2.2 compliant.</li> <li>Should have 1xIR, 1x bidirectional RS-232 for controlling third party devices, without the need to use controlling port of control system and running long control cables.</li> <li>Supports cable lengths up to 330 ft (100 m) for all resolutions.</li> </ol>	As per proposed solution

<ul> <li>7) Should support audio formats Dolby Digital<sup>®</sup>, Dolby Digital EX, Dolby Digital Plus, Dolby<sup>®</sup> TrueHD, Dolby Atmos<sup>®</sup>, DTS<sup>®</sup>, DTS ES, DTS 96/24, DTS-HD<sup>®</sup> High Res, DTS HD Master Audio<sup>™</sup>, DTS:X, LPCM up to 8 channels.</li> <li>8) Should comply to CE, IC, FCC, (Additional BIS to be</li> </ul>	
shared if applicable)	

AUDIO SOLUTION				
SL No	PRODUCT TYPE	MAKE	SPECIFICATIONS	Qty
S. No.15	Goose Neck Mic with All Accessories	Shure / Sennheiser /Sonodyne/ Equivalent	Dual Flexible gooseneck. Includes cardioid capsule. Should have immunity to RF Noise. 2 colour illuminated light ring as mute / unmute indicator on the microphone capsule. Snap fit foam windscreen. 10 pin modular connector. High close talk SPL level. Low self-noise. Freq response - 50 to 17000 Hz, Max SPL 121 dB, Signal-to- noise ration - 66dB, not more than 50 cm in length, operating temperature - 5 degree to 40 dec Celsius.	As per BOQ
S. No.16	Wireless Conference functionality with All Accessories for Wireless Mics.	Shure / Sennheiser/ Sonodyne/	Complete wireless conference functionality with encrypted digital transmission for up to 125 participants. Should be able to detect and avoid RF noise so as to deliver reliable transmission and limits signal dropouts. Encryption should be able to keep meeting private. Should use 2.5/5 GHz spectrum. Built in RF spectrum manager to monitor available channel quality. Latency - Less than 17ms. Frequency response - 100Hz - 20 kHz (+= 10dB), Dynamic range - 100dB ( A weighted), Digital audio processing - 24bit/ 48kHz, Digital audio Networking DANTE AES67.	As per BOQ
S. No.13	Access Point with All Accessories	Shure / Sennheiser / Sonodyne	Should be able to control up to 125 wireless conferencing units: Bi-directional wireless connection provides audio to & from conference units and enables real time control of all settings. Operates in 2.4 GHz / 5 GHz frequency bands, including DFS spectrum. Automatic frequency co- ordination, interference detection and avoidance. Dante digital audio (10 inputs/ 10 outputs), analogue audio input and output (XLR), Ethernet cable for audio, control & PoE power, AES-128 wireless encryption for enhanced privacy, display for basic system configuration without a laptop, LEDs indicate power, wireless connection and network status. pack should include wall/ceiling mounting plate. Dynamic range - 115dB (A-weighted)	As per BOQ
S. No.14	Charging Station with All Accessories	Shure / Sennheiser / Sonodyne	Accommodates up to 10 rechargeable batteries, 5- segment LED's on the unit display charge status individually for every battery. RJ 45 Ethernet connection enables remote monitoring of battery charge status in hours and minutes. Should charge the battery to 50% in less than 2 hours, and 100% in less than 4.5 hours. pack should include wall and rack mounting, with IEC power cable. Interface Should Be Ethernet Based, Link Speed - 10/100 Mbps	As per BOQ
S. No.14	Rechargeable Battery	Shure / Sennheiser / Sonodyne	2 additional batteries for backup. Should be included with the conferencing unit. Should be able to power up the conferencing unit up to 11 hours. Integrated test button and 5 segment LED to display charge level. Should charge with the charging unit at 50% in 1.5 hours and 100% in less than 4.5 hrs. 3-cell battery with smart Lithium Ion Battery. Should be able to remotely monitor the battery running line in hours and minutes. Dimension - 31 mmx65 mmx101.5 mm , weight - 184 gms, color - black, material - molded plastic.	As per BOQ

S. No.10,11	Bodypack + Lapel Mic with All Accessories	Shure / Sennheiser/ Sonodyne	Compact low profile Belt pack to connect with Lav or head worn mics. Integrated Omni directional mic. External microphone input. Bidirectional wireless enables return channel audio and real time remote control of all wireless microphone settings. Programmable mute button, customizable local and remote muting behaviours. Gain adjustment range - 25 to + 15 dB, max output9dBV, Headphone Output - 3.5 mm, Antenna type - Internal special Diversity, Battery type - Rechargeable Lithium Ion, battery life up to 9 hours, charge connector - USB 3.0 Type A, Mic connector - 4-pin male mini connector. Miniature omni directional Lapel mic. 4 feet cable terminates to a 4-pin TA4female connector. Transducer - Electret condenser, Freq response - 50 Hz -17kHz, Dynamic range - 102.5 dB (typical, Max input sound level - 125 dB, power requirement - +5v DC on pin 2, return on Pin1 (ground). output connector - TA4F Mini 4-Pin connector.	As per BOQ
S. No.13 S. No.12	Handheld mic transmitter with All Accessories Handheld mic with All Accessories	Shure / Sennheiser Sonodyne Shure / Sennheiser / Sonodyne	Interchangeable mic cartridge with SM58. Dual transmit antennas. Bi-directional wireless enables real time remote control of all wireless mics. Programmable mute button. Stand by more, encrypted wireless AES256 bit encryption for secure transmission. USB charging to a power source. Max input level -9dBV, configuration - unbalanced, Battery type - Rechargeable Lithium ion, battery life – up-to 15 hours. Dynamic handheld mic. Freq response - 50 to 15000 Hz, polar pattern - Cardioid, Impedance - rated at 150 Ohms. Polarity - positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3. Connector - Three pin professional audio connector (male XLR type)	As per BOQ As per BOQ
S. No.13	Access Point for wireless mic with All Accessories	Shure / Sennheiser / Sonodyne	8 Channel, Slim profile, lightweight, scalable configurations for 2, 4 or 8 channels mics. Bi-directional wireless provides return channel audio to wireless transmitters and enable wireless microphone settings. Automated frequency co-ordination to scan available spectrum and moves channel away from unexpected interferences. Dante and AES 67 digital networked audio. Cat5e cable to any other Dante equipped device. Network interface - RJ45, Power requirement - PoE, Antenna type - Internal Special diversity.	As per BOQ
S. No.14	charging Dock for wireless mics with All Accessories	Shure / Sennheiser / Sonodyne	8 channel, Network charging docks for all form factors of microphones. Charging status with 5-segment LED indicator, Remote sharing status monitoring, Network interface - 10/100Mbps, power requirement - 15 V DC @ 3.3 A max, charging time - 50% min 1.5 hrs, 100% max 3 hours.	As per BOQ
S. No.20	AV Control System with All Accessories	KRAMMER/ CRESTRON/ EXTRON	<ol> <li>Supply Installation Testing and commissioning of AV Control processor for controlling audio, video, sensors, and security systems as per site requirement.</li> <li>Supplied controller should be able to run two different programs to control two rooms simultaneously (Additional Hardware can be added to meet the requirement)</li> <li>Should have minimum 2 GB RAM, Flash 8 GB &amp; External Storage Supports up to 1 TB to load files and processing.</li> <li>Should have minimum 1x Bidirectional RS- 232/422/485 port, 2x Bidirectional RS-232 port, 8xIR/1-</li> </ol>	As per BOQ

		way serial, 8x relay supporting 1A, 30VAC/VDC, and 8x digital IO ports.	
		5) Should support BACnet communication protocol from day one, for providing direct interface to third-party building management systems over Ethernet, simplifying integration with HVAC, security, and other systems. (Additional hardware can be added to meet the requirement).	
		6) Control processor & Touch Control interface should be from same OEM, and must not require any internet connectivity for configuration, programming and running.	
		7) Should have Ethernet port supporting 1000 Mbps, industry-standard TCP/IP, UDP/IP, SFTP, DHCP, SSL, FIPS 140-2 compliant encryption, SNMP, IPv4, IPv6 & SMTP.	
		8) Should support industry standard minimum-security features and protocols using Active Directory <sup>®</sup> credential management, 802.1X authentication, TLS, SSH, and HTTPS.	
		9) Should comply to CE, UL, FCC & BIS.	
Digital Signal Processor with All Accessories	Xilica or Equivalent	Rack Mounting with 2 surface-mount brackets, Regulatory Compliance- FCC Part 15 B (US), CE (Europe), RoHS Directive (Europe), EN 55032, EN 61000-3-2, EN 61000-3-3, EN 55035, CB Scheme, Power Requirements- PoE (Power over Ethernet), IEEE 802.3af, class 0, Local Power-+12VDC / 2A via external power supply (can operate as redundant power to PoE), Ethernet- (1) RH45 with Power, Data indicator lights, Power over Ethernet, Dante- RJ45 with Link, Data indicator lights, USB (Recovery)- Micro-USB (side mounted), for device recovery, Audio Networking- Dante <sup>™</sup> 4x4 bidirectional, AES67-compliant.	As per BOQ
Audio Amplifier with All Accessories	AUDAC / Sonodyne / market reputed brand	4 channel Class D amplifier with all accessories (Frequency- 20 Hz - 20 kHz, SNR- > 90 dB, THD+N (@ 1 kHz)- < 0.1% (1/2 Rated Power), Crosstalk (@ 1 kHz)- > 70 dB, Power Supply- Switching mode 100 ~ 240 V AC / 50 ~ 60 Hz, RMS Power- @ 4 Ω Stereo 4 x 100 W.	As per BOQ
Column Mount Speakers with All Accessories (Inc.	AUDAC/Sonodyne /Sennheiser / market reputed	2-way column mount speakers, Impedance: 4 Ohms; 1"- 2" Dome Tweeter; 8" Full Range; Frequency response: 100Hz – 20KHz; Sensitivity: 95dB; RMS Wattage: 100W-	As per BOQ
	Processor with All Accessories Audio Amplifier with All Accessories Column Mount Speakers with All	Processor with All Accessories       XIIICa or Equivalent         Audio Amplifier with All Accessories       AUDAC / Sonodyne / market reputed brand         Column Mount Speakers with All Accessories (Inc.       AUDAC/Sonodyne /Sennheiser / market reputed	Digital Signal       Xilica or         Processor with All       Xilica or         Processor with All       Xilica or         Equivalent       Si Should support CEC Particle State         Audio Amplifier       Xilica or         Equivalent       Si Should Support CEC Particle State         Audio Amplifier       Xilica or         Equivalent       Si Should Support CEC Particle State         Audio Amplifier       Xilica or         Column Mount       Sondotyre / market reputed         Audio Amplifier       XuDAC / Sonodyre / market reputed         Audio Amplifier       XuDAC/Sonodyre / Yearn Parter         Yearn Parter       Yearn Parter         Audio Amplifier       XuDAC / Sonodyre / Market reputed         Yearn Parter       Yearn Parter         Yearn Parter       Yearn Parter <t< td=""></t<>

Switching and Control Equipment: -				
S. No.24	Integrator	Floor Box with HDMI, LAN, Power	As	
S. No.34		10m 4K HDMI cable	per BOQ	
S. No.40	Crestron / Equivalent	10.1 in. Room Scheduling Touch Screen, Black Smooth, includes one TSW-1070-LB-B-S light bar	BUQ	
S. No.41		10th Generation Wireless touch interface	1	
S. No.42		Docking station for iPAD		
S. No.43	Netrack / Valrack /Equivalent.	12U equipment rack		

Cables, Conne	ectors and Installation	
S. No.44	Cable & Connectors (HDMI/Audio/Patch Cords, etc.)	Lot
S. No.45	Installation, Integration, Commissioning Charges, Project Documentation & Training, Project Design, Planning and Co-Ordination, Programming Charges (If Any), Freight Charges	dof
Comprehensi	ve Annual Maintenance Contract	
S. No.46	4th Year Comprehensive AMC	dol
S. No.47	5th Year Comprehensive AMC	dol

Note:	BA to Submit quantity of sub-line items as per their proposed solution. **********
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