Section VII. Technical Specifications

Bidders must state **"Comply"** in the column **"Statement of Compliance"** against each of the individual parameters of each "Specifications".

LOT 2	SUPPLY, DELIVERY, INTEGRATION, INSTALLATION, TRAINING, TESTING AND COMMISSIONING OF HIGH DEFINITION MULTIPURPOSE STUDIO AUDIO EQUIPMENTS, SYSTEMS AND IP BASED TECHNICAL PRODUCTION COMMUNICATION SYSTEM **Bidders shall comply with the following minimum Technical Specifications:**	QTY	Brand names	Statement of Compliance
1.0	Switcher processor with 32 inputs, 24 Outputs with each input having a format converter and frame synchronizer paired with a 2 M/E Control panel 3G-capable, 4K-ready, IP-ready Switcher in an affordable pack 12G-SDI based live switcher 2M/E 20XPT Compact Panel, 4 Keyers per M/E 32 Inputs, each has Format Converter and Frame Synchronizer 24 Outputs, 20ch Frame Memory, 2ch Multi Viewer Tally, GPIO, Device Control, 20 channels of frame memory Format converter (FC) and frame synchronizer (FS) functions are provided for every input, 2-Channel Multi-Viewer supports 4K (UHD *-or its equivalent or better*	2		
2.0	4 M/E Ultra HD live production switcher Supports 12G-SDI at 10-Bit, 40 x 12G-SDI Inputs 24 x 12G-SDI Outputs, Webcam Output via USB-C Frame Rate/Format Converter per Input, 156-Channel Audio Mixer, 16 x Upstream, 4 x 4 DVEs, 16 Advanced Chroma Keyers, 4 media players, 4 independent Ultra HD multiviews, 2 SuperSource processors, built in talkback Downstream Keyer, Chroma/Luma Keyers Color/Pattern Generators *-or its equivalent or better*	2		
3.0	Control interface for the separately available Switcher 2 x M/E Rows, 30 x Input Buttons Each,3 x System Control LCDs for Each Row High-Quality Buttons/Knobs/Controls, 4 x GbE Ethernet Ports with Loop-outs Custom Labeling, Redundant Power Supply, 12 On-Air Indicators, 30 Cross-Points, 3-Axis Joystick, Keypad, 2 x Fader Bars, USB Type-C Input for Firmware Updates *-or its equivalent or better*	**2**		
4.0	Professional live production switcher built into a broadcast control panel 8-Input 3G-SDI 1080p60 Live Switcher, ISO Record Each Input to Separate Files, Supports Remote Internet Cameras, Streaming Support, USB & M.2 Recording, Cloud Integration, Up to 16 Multiview Output Sources Audio Mixing, Transitions, T-Bar, AUX, Customizable Electronic LCDs Camera Control, Timecode, Talkback *-or its equivalent or better*	5		

5.0	Zero-Latency Routing Switcher, 40 x 12G-SDI Inputs,40 x 12G-SDI Outputs Supports Up to DCI 4K60 Video, Combines SD, HD, UHD 4K & DCI 4K Video Push-Button, Knob & Ethernet Control, 2.2" Front Panel LCD Status Display SDI Reclocking *-or its equivalent or better*	7		
6.0	Routing Switcher controller, 21 Programmable Buttons, LCD Information Screen Push Buttons on Front Panel, RS-422 Input and Output Ethernet with PoE for Remote Control, Control Software Included *-or its equivalent or better*	7		
7.0	Advanced real time compositing processor designed for keying live action video with next generation broadcast graphics, virtual sets and more. Up to UHD 4K60 via Single 12G-SDI BNC, 1-Touch Keying, Advanced Compositing, SD/HD/3G/6G/12G-SDI Support, 8 SDI Video Inputs, 9 SDI Video Outputs, 7 SDI Video Loop Outputs Reclocked SD, HD, Ultra HD for corresponding inputs. SDI Rates - 270Mb, 1.5G, 3G, 6G, 12G. Video Input Re-Sync On all inputs *-or its equivalent or better*	4		
8.0	Hardware chroma keyer remote control 2 x USB 2.0 and 1 x USB 3.0 for firmware updates S-VGA Output 2 x 10/100 Mbps Ethernet ports to connect to LAN networks for controlling hardware keyer 8 x rotary knobs for adjusting parameters *-or its equivalent or better*	2		
9.0	Format converter - 1089 up, down, cross, and standards conversions for formats ranging from NTSC and PAL to 2K and UHD 4K video Dual SD/HD/3G/6G/12G-SDI I/O, Quad-Link SDI Output HDMI 2.0 Input and Output, Supports SD, HD, 2K, and UHD 4K Automatic Input Signal Detection, Redundant SDI Input & Looped SDI Output 24-Bit, 48 kHz Audio, XLR and RCA Audio Inputs, Front-Panel Controls Software Control via RJ45 Ethernet *-or its equivalent or better*	**5**		
10.0	File-Based Video Player and Recorder, H.264/H.265 10-Bit 4:2:2 Video Records Compressed in ProRes / DNxHD, 1 x 12G-SDI Input, 2 x 12G-SDI Outputs, 2 x 2.5"" SSD Slots & 2 x SD Card Slots, 1 x HDMI Input, 1 HDMI Output, 1 x SDI Loop Output, 1 x USB-C Out, Speaker, Remote, 10G Ethernet Port, Front-Panel Buttons, Jog Wheel, LCD, Timecode, Reference & RS-422 In/Out *-or its equivalent or better*	10		

11.0	8-Channel 3G-SDI Live Streaming Switcher, Supports up to 1080p60 RTMP Streaming via Ethernet or USB-C, Record Program Out and Individual Inputs, 11-Input, 2-Channel Audio Mixer, Input Frame Rate and Format Converter, Re-Sync on All 3G-SDI Inputs, HD Multiview Output with up to 16 Views, Local and Software Switching, 4 x Upstream, 2 x Downstream Keyers *-or its equivalent or better*	5		
12.0	Wireless Video transmitter with 3 mile / 6km / 20,000ft on-ground transmission range Transmission at 1080p/60fps with a max bitrate of 40Mbps as well as live audio monitoring at 16-bit 48 kHz AES 256-Bit Encryption HDMI/3G-SDI I/O *-or its equivalent or better*	10		
13.0	9-Person Noise-Canceling Intercom System, Two-Mic Environmental Noise Cancellation, Reliable 1.9 GHz DECT 6.0 Technology, Includes Hub with Wired Headset, 8 Single-Ear Remote Headsets, Wide Frequency Response for Clear Audio 1100' 2-Way Operating Range, Mute/PTT Button or Rotate Boom to Mute Includes Batteries and 8-Bay Charger, Expandable System *-or its equivalent or better*	5		
14.0	65" OLED 4K TV Monitor 65" 4K OLED 120Hz , Res: 4K Ultra HD (3,840 x 2,160) Supports 4K 120Hz, eARC, VRR, ALLM, QMS as specified in HDMI 2.1 (4 port), HDR10 / HLG, 4K 120 fps (HDMI, USB) *-or its equivalent or better*	4		
15.0	55" OLED 4K TV Monitor 55" 4K OLED 120Hz , Resolution: 4K Ultra HD (3,840 x 2,160), Supports 4K 120Hz, eARC, VRR, ALLM, QMS as specified in HDMI 2.1 (4 port), HDR10 / HLG, 4K 120 fps (HDMI, USB) *-or its equivalent or better*	4		
16.0	42" OLED 4K TV Set Monitor, 42" 4K OLED 120Hz , Res: 4K Ultra HD (3,840 x 2,160), Supports 4K 120Hz, eARC, VRR, ALLM, QMS as specified in HDMI 2.1 (4 port), HDR10 / HLG, 4K 120 fps (HDMI, USB) *-or its equivalent or better*	4		
17.0	32-inch, 4K HDR, 1600 nits, 1,152 zones Mini LED Backlight, 120Hz VRR, HDR, Dolby Vision, HDR-10, HLG, ΔE < 1, DCI-P3, Hardware Calibration, HDMI(v2.1), VESA Display HDR 1400 *-or its equivalent or better*	**4**		

18.0	Rack mountable reference monitor 15.6" 3840 x 2160 Active-Matrix TFT LCD Supports up to DCI 4K60 Video, 2 x Multi-Rate 12G-SDI Inputs 1 x Optical Fiber SDI Socket, SDI Loop-Through Output, Tally Input, Dual 3D LUT Support, Peaking, Zoom & Adjustable Markers H/V Delay, Blue Only & Frame Markers, Front Panel & Ethernet Control, Upscales SD/HD to UHD *-or its equivalent or better*	8		
19.0	12G-SDI Cable roll (300m) 75-Ohm 12G-SDI UHD Video Coax Cable – Full 656'/200m Roll 75 ohm Digital Video Coaxial Cable Ultra Low Loss Coax (12G-SDI) *-or its equivalent or better*	4		
20.0	HDMI 2.1 cable set at 5m and 10m Supports 3D, DCI 4K, Deep Color 24kt Gold-Plated Connectors HDMI Ethernet Channel Audio Return Channel *-or its equivalent or better*	10		
	NEWS STUDIO CAMERA SYSTEM			
1.0	Broadcast Camera with Super35 sized sensor, Interchangeable mount from B4 to EF to PL 6K CMOS Sensor, Dual Native ISO, 2/3" B4 Lens Mount & Active EF Mount, Convertible to PL mount, 6K RAW Recording, Records to ProRes, H.265/264 at 3840 x 2160 (Ultra HD) up to 60 fps 12G-SDI Input & Output, Genlock/Timecode, 13 x Stops of Dynamic Range 2 x UHS-II SD, 2 x CFast 2.0 Slots, Built-In 2/4/6-Stop ND Filters XLR Inputs, 3.5mm Audio Output *-or its equivalent or better*	10		
1.1	Camera Fiber Converter Converts broadcast camera to SMPTE fiber connection For Broadcast camera, Full Studio Connectivity, SMPTE Fiber Interface, 12G-SDI Output, 3 x 3G-SDI Return Feeds, 5-Pin XLR Talkback Headset Connections, Camera Controls Moved to Camera Rear *-or its equivalent or better*	10		
1.2	Studio Fiber Converter Convert SMPTE fiber to 12G-SDI broadcast equipment, Connects to Camera Fiber Converter, For HD and UHD 4K Productions, Bi-Directional SMPTE Fiber Link, XLR Audio Breakout, Reference and Control Connections *-or its equivalent or better*	10		

1.3	Camera Control Unit (Controls up to 4 cameras at one time) Camera Control Panel (Controls up to 4 Cameras, Iris, Shutter Speed & Paint Control) Accessory functions: Ethernet Connectivity, LCD Screens with Soft Buttons & Encoders, 4 x High-Quality Joysticks, Recallable Presets *-or its equivalent or better*	6		
1.4	Professional studio camera viewfinder screen 7" 1920 x 1200 TFT LCD Viewfinder Screen 3G-SDI Connector to Camera, 2000 cd/m² Brightness, 4-Pin XLR Power, V-Lock Mount Rotary Dials, Customizable Buttons, Detachable Sun Hood *-or its equivalent or better*	4		
1.5	Broadcast Camera Lens 8-128mm B4 Lens, 16x Zoom Ratio, T1.9 (8mm) to 2.8 (128mm) Max Aperture, Digital Servo for Focus & Zoom, Electronic Back Focus Adjustment Macro Focus Function, 2.6' Minimum Object Distance from Front *-or its equivalent or better*	10		
1.6	Pedestal Tripod with Teleprompter Set with complete accessories Teleprompter with SDI LED Monitor, Pedestal with Wheeled Tripod Dolly 19" SDI Talent Monitor, Carry Bags for Pedestal Legs and Dolly 70/30 Beamsplitter Glass, SDI, HDMI, and VGA Inputs, 1000 cd/m² Brightness, 4:3 Aspect Ratio, Adjustable Lens Hood, Prompter Base, Hand-Controlled Scroller, Professional Teleprompter Software compatible with Mac, Windows, and other operating systems *-or its equivalent or better*	8		
1.7	12G-SDI/HDMI Broadcast Studio Monitor (V-Mount) 23.6" 3840 x 2160 Resolution Monitor Supports up to DCI 4K Input Supports Accurate Color Calibration HDR Support, Load Custom 3D LUTs 178° H/V Viewing Angle 300 cd/m² Brightness 1000:1 Contrast Ratio On-Screen Markers, Focus Peaking V-Mount Battery Plate XLR 4-Pin 12-24 VDC Power Input *-or its equivalent or better*	5		
2.0	High resolution LED Video Wall set with processor – Screen Size: Length x Width = 20 square meters - Ultra-High Reliability in Slim-line panel design - Low power consumptions and low heat to secure lifetime. - Dual protection of the panel -Anti-collision, dust proof and water proof of the module. - 16:9 aspect ratio panel allow native 2k/4k pixel to pixel resolution - Physical Pitch: 1.60 mm or better Physical Configuration: - Pixel Density: Atleats 4-9,600 pixels/m2 – Atleast 80,000 pixels/panel LED Module - Processing: 14 - 16 bit - Contrast Ratio: 20,000: 1 or better	1		

	- Brightness: >600 nits; Horizontal and Vertical - Viewing Angle: 160 deg. Or better -Expected LED Lifetime: 100,000 Hrs ***-or its equivalent or better***			
3.0	LEMO/SMPTE Fiber cable set SMPTE 304M camera cable for high-speed uncompressed HD video transmissions Split drum for safe and easy connector pigtail storage 3-position brake lock - free spool, soft brake, full lock Rugged winding handle with storage Ultra-high-abrasion resistant and load bearing cables Excellent flexing and twist capabilities" Length minimum of 100 meters per roll ***-or its equivalent or better***	10	
4.0	2-Channel LC Single-Mode Fiber Tactical Snake Cable LC Connectors, Durable Design Cut, Crush, and Chemical Resistant Abrasion-Resistant Polyurethane Jacket Exceeds MIL-PRF-85045 Specifications Length minimum of 1500'/ 457.2 m ***-or its equivalent or better***	10	
OUTSIDE BROADCAST CAMERA			
6.0	Studio camera Active EF Lens Mount, Capture up to 6K Resolution Live Streaming, Remote Controlled ND Filters Raw Recording to External USB-C Disks, Records Raw, Up to 25,600 ISO 7" High-Brightness HDR Touchscreen LCD, 12G-SDI, HDMI & 10G Ethernet Video I/O XLR & 3.5mm Audio Input, Built-In Mics, Built-In Color Corrector ***-or its equivalent or better***	**8**	
6.1	Studio Camera Lens *(should be compatible with item 6.0)* 8-135mm f/3.5-5.6 IS STM Lens Power zoom, EF-S-Mount Lens/APS-C Format 28.8-216mm (35mm Equivalent), Aperture Range: f/3.5 to f/36 Ring Lock Rounded 7-Blade Diaphragm ***-or its equivalent or better***	**8**	
6.2	*(should be compatible in team 6.0)* 70-200mm EF-Mount Lens/Full-Frame Format, Aperture Range: f/2.8 to f/32 Internal Focus, Focus Range Limiter, Weather-Sealed Design, Fluorine Coating Detachable, Rotatable Tripod Collar, Rounded 8-Blade Diaphragm" ***-or its equivalent or better***	**8**	
6.3	50mm prime lens EF-Mount Lens/Full-Frame Format Aperture Range: f/1.2 to f/16 One Aspherical Element ***-or its equivalent or better***	**4**	

6.4	Professional Tripod and Dolly Travel Kit withTeleprompter with 15" LED Monitor Tripod with 44.1 lb Load Capacity Rolling Hard Case for Teleprompter Dolly with Wheels and Cable Guards 70/30 Beamsplitter Glass HDMI, BNC Composite, and VGA Inputs 1920 x 1080 Resolution 1000 cd/m² Brightness Hand-Controlled Scroller, Professional Telemprompter Software compatible with Mac, Windows, and other Operating Systems *-or its equivalent or better*	**8**		
7.0	4K 10bit HDR professional OLED monitors, 30" 16:9 OLED Panel HDMI | DisplayPort | USB-C, 3840 x 2160 Resolution at 60 Hz | With Built-in color calibrator 100% sRGB, Integrated Speakers & USB Hub" *-or its equivalent or better*	**5**		
8.0	LAN cable set Cat6 Standard 1000' Length Four Pairs of Shielded Twisted Wire Designed for Fast & Gigabit Ethernet 24 AWG Solid Bare Copper Conductors *-or its equivalent or better*	10		
6.5	150 watt vmount battery V-mount battery for broadcast camera 156Wh or 99Wh lithium-ion battery 12A continous draw (20 A peak, 75A inrush) p-Tap and Smart USB ports >1000 cycle life (flat capacity curve) *-or its equivalent or better*	8		
MOBILE AND GIMBAL CAMERAS				
9.0	Compact cinema mirrorless camera 12.1MP Full-Frame CMOS Sensor, UHD 4K up to 120 | 1080p up to 240 Compact Form for Cage-Free Operation, 10-Bit 4:2:2,16-Bit Raw Output S-Cinetone/S-Log3/HLG, 15+ Stops DR, Detachable 2 x XLR/TRS Adapter Handle Phase Detection AF/Face Tracking/Eye AF, Approximately 80 to 409,600 Expanded ISO Range Dual CFexpress Type A/SDXC Card Slots" *-or its equivalent or better*	8		
9.1	*(should be compatible with item 9.0)* Standard constant f2.8 aperture lens Covers the Full-Frame Sensor Format Focal range : 24-70mm Aperture Range: f/2.8 to f/22" *-or its equivalent or better*	8		
9.2	*(should be compatible with item 9.0)* Wide angle zoom constant f2.8 lens Covers the Full-Frame Sensor Format Focal range : 16-35mm Aperture Range: f/2.8 to f/22" *-or its equivalent or better*	8		

	(should be compatible with item 9.0)			
9.3	Telephoto zoom constant f2.8 lens Covers the Full-Frame Sensor Format Focal range : 70-200mm Aperture Range: f/2.8 to f/22" ***-or its equivalent or better***	8		
9.4	*(should be compatible with item 9.0)* 50mm prime lens with F1.4 maximum aperture Covers the Full-Frame Sensor Format (for inclusion) ***-or its equivalent or better***	4		
9.5	*(should be compatible with item 9.0)* 85mm prime lens with F1.8 maximum aperture, Covers the Full-Frame Sensor Format ***-or its equivalent or better***	4		
9.6	*(should be compatible with item 9.0)* Extra batteries for mirrorless cameras at least 2,000 mAh capacity Battery charger ***-or its equivalent or better***	24		
10.0	Professional 3 axis gimbal Carbon fiber body, at least 10 lb Payload, 1.8" OLED Touchscreen, Instant Mode Switching, Auto-Lock Axes, Supports Wireless Transmitter, LiDAR ***-or its equivalent or better***	5		
11.0	Wireless Video Transmitter/Receiver Set, with HDMI/SDI Input, SDI Loop Out, OLED Screen, USB Type-C Power Input, 1000' Line-of-Sight 1080p60 Transmission, 5.1 to 5.9 GHz Frequency Range, AES-128 Encryption, 40 ms Latency ***-or its equivalent or better***	8		
12.0	Large sensor professional drone, 3-Axis Gimbal with Tri-Camera sytem, 20MP 5.1K Wide-Angle 4/3 CMOS 166mm 12MP 7x Zoom Telephoto, 70mm 48MP 3x Zoom Medium Telephoto lens, at least 40 Minutes of Flight Time" ***-or its equivalent or better***	2		
13.0	FPV Drone set Close-Up Filming Indoors or Outside Ultra-Wide 4K100p Stabilized Video Propeller Guards for Safe Flying At least 6.0 -Mile Video Transmission Range Downward Sensing Obstacle Avoidance Emergency Brake & RTH Safety Features With min capability of at least 18 Minutes of Flight Time 3 Speed Modes with speed capability of at least 60 mph ***-or its equivalent or better***	2		
	LARGE SENSOR REMOTE CAMERA			
14.0	PTZ Camera with Full Frame sensor Supports up to UHD 4K120 Video Lens Interchangeability 4K Full-Frame Sensor 12G-SDI, HDMI & Streaming Output Variable Electronic ND Filter Smooth, Slow Pan & Tilt Movement IR, IP & Web App Remote Control Flexible PoE+ Installation Genlock, Timecode & Tally Lamps ***-or its equivalent or better***	4		

14.1	*(should be compatible with 14.0)* Powerzoom 28-135mm, constant aperture F4, Lens/Full-Frame Format Aperture Range: f/4 to f/22 Smooth Motion Optics Support 4K Video No Focus Shift or Lens Breathing Power Zoom with Linear Autofocus Motor; Internal Focus Image Stabilization Control Rings for Iris, Focus, and Zoom Removable, Rotating Tripod Collar ***-or its equivalent or better***	4		
14.2	*(should be compatible with 14.0)* Compact PTZ Controller Pan, Tilt, Zoom Control via Joystick Control up to 100 Cameras via IP Camera Paint Functions Auto IP and Camera Number Assignment Store up to 100 Camera Presets Tally Indicator ***-or its equivalent or better***	4		
14.3	Mounting and other accessories for PTZ Camera Accessories: Ceiling and Camera Brackets Lens Release Safety Button Cover Travel heavy duty case ***-or its equivalent or better***	4		
	AUDIO SYSTEMS STUDIO			
15.0	Compact digital mixer 9" Touchscreen & 8 + 1 Motorized Faders Input: 16 Mono + 1 Stereo + 2 FX Returns Output: 1 Stereo + 6 Mix Bus, and 2 FX 12 XLR + 4 XLR-1/4" Inputs and 8 XLR Out 18 FX, GEQ on Mix 1-6 & Stereo Channels 48/96 kHz Sampling Rate With presets DAW Remote Mode + Software Editor Wireless Remote Control ***-or its equivalent or better***	4		
16.0	Audio digital mixing console with 48-channel, 36-bus digital mixing console well suited for live sound 16 Microphone Preamps At least 7" Capacitive Touchscreen 96 kHz FPGA Processing Eight Stereo FX Engines with Returns 32 x 32 USB Audio Interface AES Output 12 Stereo Mixes + LR Channel LCD Displays 8 Assignable Keys Port for Remote Audio & Expansion ***-or its equivalent or better***	4		

17.0	Compact Integrated Audio Production Studio 4 High-End Mic/Line/Instrument Preamps 6 Faders and Large Color Touchscreen Multitrack Recording to microSD or USB Mix-Minus for Phone Call Interviews Studio-Quality Processing 4 Headphone Outputs for Host and Guests 8 Programmable Pads for Audio, FX & MIDI 2 Built-In Wireless Mic Receivers Bluetooth for Calls & Wireless Playback *-or its equivalent or better*	8		
18.0	Professional wireless broadcast lav Microphones 2-Channel True-Diversity Receiver 2 Bodypack Transmitters with Auto Gain 2 Omnidirectional Lav Mics Auto-Scan Frequencies One-Button Scan and Sync /NFC & IR Sync Bright OLED Display, 4-Channel Mixer Headphone Output, Wired Mic Input At least 4.0-Hour AA Batteries + USB Power Up to 16 Mics on Set / At least 330' Range *-or its equivalent or better*	20		
19.0	Compact Analog/USB Camera-Mount Shotgun Microphone Runs on Plug-In Power or USB Power Simple Operation with No Controls 3.5mm TRS Output to Camera or Headphones USB Type-C Digital Audio Output Detachable Flat 3.5mm Cable Windscreen Includes Shoe/Pole Shockmount *-or its equivalent or better*	20		
20.0	Professional studio boom microphone Frequency Range : 40 Hz to 20 kHz Maximum SPL: Approximately 134 dB SPL, 142 dB SPL Impedance : 150 Ohms Load Impedance : 1000 Ohms *-or its equivalent or better*	5		
21.0	Professional studio broadcast microphone Broadcast Sound in USB Format USB and XLR Connections Built-In Pop Filter 3.5mm Jack with Direct Monitoring Should be inclusive of optimization software application Cardioid Pattern With Integrated Mic Control Panel High-Quality 48 kHz / 24-Bit Audio Frequency Range 20 Hz to 20 kHz Maximum SPL Unidirectional: Approximately 132 dB SPL Analog Output 1 x XLR 3-Pin Male (on Mic) USB & Digital Output 1 x Micro-USB Female (on Mic) Headphone Output 1 x 1/8"" / 3.5 mm" *-or its equivalent or better*	10		
22.0	Professional monitor Powered Bookshelf Speaker Up to 100W Output 2-Way, Bass-Reflex Design At least 5.0 Woofer with Dome-Tweeter 54 Hz to 20 kHz Frequency Response 1x XLR, 1x RCA Input Class-D Amplifiers *-or its equivalent or better*	20		

23.0	Professional Monitor Headphones 40mm Neodymium Drivers Closed Design Swiveling Earcups Single-Sided Cable Coiled Cable Soft Case **-or its equivalent or better**	10		
24.0	55" OLED 4K TVs 55" 4K OLED 120Hz , Resolution: 4K Ultra HD (3,840 x 2,160) (Supports 4K 120Hz, eARC, VRR, ALLM, QMS as specified in HDMI 2.1 (4 port)), TV / HDR10 / HLG, 4K 120 fps (HDMI, USB) **-or its equivalent or better**	2		
	INSTALLATION, COMMISIONING, TRAINING, USER MANUALS AND ACCESSORIES **-or its equivalent or better**	1		
	Additional Requirements			
1.	Submission of proposed system block diagram to ensure interoperability of the equipment (Annex "A")			
2.	Compliance with the Terms of Reference (Annex "B")			
	Installation Materials, Cables and Wiring Code 1. All items, cables and other installation materials and tools required for the successful installation of the systems and equipment shall be supplied by the system integrator. 2. Cables and connectors shall be of high quality and from respectable manufacturers. Unbranded products shall not be accepted. 3. For distances less than 100 meters, copper cable can be used. But for distances more than 100 meters, fiber cable must be used. 4. The winning bidder/system integrator shall submit samples of all the cables and connectors offered together with their specifications for the Procuring Entity's approval before installation. 5. The winning bidder/system integrator shall ensure that all the cables are grouped and laid properly and neatly according to the signals being carried. Separate groups shall be formed for power cables, control cables, video cables, low level audio or microphone cables, high level or line level audio cables, intercommunications cables LAN cables, Fiber Optics cables and speaker cables. Inter-rack cable connection to equipment must be laid in that manner (see attached picture) 6. All cables, especially those at the racks, shall be arranged in a tidy and orderly manner. 7. All cabling and wiring shall have a proper coding system, which will be provided by PCO to standardize the cable color coding in all PCO stations nationwide. 8. A properly and correctly documented cable schedule shall be supplied on a standard software package after the completion of the installation. Two sets of the final cable schedule shall be supplied in a properly bound volume. 9. All installation materials left after completing the project will remain as PCO property and shall not be brought out by the bidder/integrator.			

	10. The Winning Bidder/System Integrator shall closely supervise the installation to ensure that all cabling within the rack is so arranged that the equipment is easily and conveniently serviceable in such a way that it shall be possible to disconnect and remove any equipment without disturbing the cable looms within the rack.			

Conforme:

Full Name and Signature of :
Bidder/Authorized Rep.

Designation :

Name of Company :

Section VIII. Checklist of Technical and Financial Documents