

ANNEXURE A: TECHNICAL SPECIFICATION SHEET

IMPORTANT WARNING: Bidders must respond truthfully and accurately to every specification requirement. A “YES” response constitutes confirmation that the bidder’s offer fully complies with the stated requirement. If any such representation is found to be false, misleading or materially inaccurate during evaluation, award, contracting, implementation or acceptance, ACSA may, subject to the applicable procurement rules, tender conditions and law, disqualify the bidder, withdraw or cancel the award, terminate the contract, recover losses or damages, report the matter to the relevant authorities, and pursue any other available contractual or legal remedy.

CATEGORY	ITEM	TECHNICAL AREA	TECHNICAL SPEC DESCRIPTION	FULL COMPLIANCE	BIDDERS MUST INDICATE COMPLIANCE WITH EACH CRITERION BY RESPONDING “YES” OR “NO”
Media Room	Primary Display (LED Video Wall)	Video Wall Size / Active Area	Modular LED video wall, approx. 5 m (W) x 2 m (H), ~10 m2 active display area	Modular LED video wall approx. 5 m x 2 m (~10 m2 active area)	
Media Room	Primary Display (LED Video Wall)	Refresh Rate	Refresh rate (flicker-free on camera)	>= 3,840 Hz (flicker-free on camera)	
Media Room	Primary Display (LED Video Wall)	Greyscale Processing	Greyscale processing depth	14-16 bit greyscale processing	
Media Room	Primary Display (LED Video Wall)	Contrast Ratio	Contrast ratio	>= 5,000:1	
Media Room	Primary Display (LED Video Wall)	Colour Gamut	Colour gamut / HDR	Wide colour gamut with HDR support	
Media Room	Primary Display (LED Video Wall)	Viewing Angle	Viewing angle	>= 160 deg H / >= 160 deg V	
Media Room	Primary Display (LED Video Wall)	Build Quality	Cabinet, panel gap, weight and serviceability	Die-cast aluminium cabinet, flatness <= 0.1 mm; panel gap <= 0.2 mm seamless; <= 9 kg per cabinet; front-serviceable magnetic modules	
Media Room	Primary Display (LED Video Wall)	Control & Processing	Video processor, inputs, scaling and redundancy	Video processor (LED Video Wall Control System); inputs HDMI 2.0, DisplayPort, DVI, SDI; native resolution mapping + 4K input scaling; dual power supply and dual signal backup	
Media Room	Primary Display (LED Video Wall)	Infrastructure	Power, cooling, mounting and lifespan	Dedicated circuit(s) ~2.5 kW avg / 8 kW peak per 10 m2; fanless or ultra-quiet cooling; wall/floor mount with structural assessment (400-500 kg); lifespan >= 100,000 hours	
Media Room	Display	Resolution / Pixel Pitch	Resolution or Pixel Pitch	>= 4K Resolution or Pixel Pitch <= 1.5	
Media Room	Display	Brightness	Brightness Level	The display technology proposed by the bidders must adhere to the following minimum brightness specifications for either display technology option: • Laser Short Throw Project - Brightness Level > 4000 Lumens • Large Display Screen - Minimum > 700nits • Engineered LED Display – Minimum > 600 nits	

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Media Room	Display	Screen Operation	Support 24/7 continuous operation	All Display technology must support 24/7 continuous operation.	
Media Room	Wireless Presentation System	Wireless Presentation System	Multiple Casting Protocols	Support Multiple Casting Protocols	
Media Room	Integration	Integration	Integrate with ACSA's Teams Platform	Seamlessly Integrate with ACSA's Teams Platform	
Media Room	Wireless Projecting	Wireless Projecting	Wireless Projecting	Capability to project wirelessly various types of content onto the media rooms screen using ACSA's TCP/IP network	
Media Room	Control Panel System	Control Panel System	Central Control Panel System Functionality	Control Panel Included	
Media Room	Audio System	Audio System	Audio System Functionality	The audio system should provide functions and features for both roaming and lapel microphones designed for presenters	
Media Room	Panel System	Teams Room Panel Certified	Teams Room Panel Certified	Panel should be Microsoft Teams Room Panel Certified	
Media Room	Panel System	Connectivity	UTP and Wi-Fi	Support both UTP and Wi-Fi as a Network Connectivity Medium	
Media Room	Panel System	POE	POE	Support POE	
Media Room	All Equipment	Warranty	Warranty	Minimum three-year warranty, along with provisions for next-business-day repair and replacement services.	
Media Room	Supplementary Display	Quantity & Size	Supplementary LED flat-panel displays, one per side wall	Two (2) LED flat panels, >= 98" diagonal, one mounted per side wall	
Media Room	Supplementary Display	Resolution	Supplementary display resolution	4K UHD (3840 x 2160) minimum	
Media Room	Supplementary Display	Brightness & Contrast	Supplementary display brightness and contrast	>= 500 nits and contrast >= 4,000:1	
Media Room	Supplementary Display	Viewing Angle	Supplementary display viewing angle	>= 178 deg H / >= 178 deg V	
Media Room	Supplementary Display	Operation / Duty Cycle	Commercial extended-use duty cycle	Rated for 16+ hours/day commercial operation	
Media Room	Display System	Multi-Screen Content Behaviour	Extend and Mirror/Duplicate modes selectable by operator	Supports both Extend and Mirror/Duplicate modes, selectable via central control interface	
Media Room	Audio System	Sound Reinforcement	Voice amplification and loudspeaker coverage; low-frequency reinforcement	Voice amplified throughout the venue via loudspeakers giving uniform coverage with no dead zones; dedicated subwoofer(s); even SPL across all seating	
Media Room	Audio System	Wireless Microphone - RF	Wireless technology and RF channel capacity	UHF or digital wireless, interference-resistant; minimum 12 clean channels plus spare capacity	
Media Room	Audio System	Wireless Microphone - Signal Processing	Dedicated DSP with automatic mixing	Dedicated digital audio processor (DSP) with auto-mixing capability	
Media Room	Audio System	Wireless Microphone - Battery Life	Battery life per session	Sufficient for a full session (8 hours); rechargeable or field-replaceable	

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Media Room	Audio System	Podium Audio Control	Podium control of audio, including microphone-system deactivation	Podium control panel: deactivate the microphone system, mute/deactivate ceiling mic while PA active, and mute/unmute individual wireless mics via the control panel	
Media Room	Wireless Presentation System	Device Compatibility	Cross-platform device compatibility	Full compatibility across Windows, Microsoft Teams, macOS, iOS, Android and existing ACSA solutions	
Media Room	System Integration	Unified Control	Single interface and interoperability protocols	Single interface for display, audio and room functions using standards-based protocols (AV-over-IP, CEC or vendor APIs)	
Media Room	System Integration	Resilience	System resilience / redundancy	Critical display, control and conferencing systems must include redundancy such that failure of any single component does not render the room unusable.	
Media Room	Information Display	40" Door Display - Resolution	40" door display resolution	4K UHD	
Media Room	Information Display	40" Door Display - Emergency Override	Priority emergency notification override	Capable of receiving and displaying a priority emergency notification that overrides all other content	
Emergency Command Centre	Video Wall (9 x 50")	Screen Size & Configuration	Like-for-like replacement of 9 x 50" panels in unchanged 3x3 layout	50" per panel, 3x3 (9 panels), configuration unchanged from existing	
Emergency Command Centre	Video Wall (9 x 50")	Resolution	Video wall panel resolution	4K UHD (3840 x 2160) minimum per panel	
Emergency Command Centre	Video Wall (9 x 50")	Bezel Width	Combined bezel width for minimal seam	Ultra-narrow bezel, <= 3.5 mm combined	
Emergency Command Centre	Video Wall (9 x 50")	Brightness	Panel brightness	>= 500 nits, commercial-grade	
Emergency Command Centre	Video Wall (9 x 50")	Operation	24/7 continuous operation	Rated for 24/7 continuous operation	
Emergency Command Centre	Video Wall (9 x 50")	Input Support	Video inputs	HDMI 2.0/2.1, DisplayPort and SDI (live camera feed)	
Emergency Command Centre	Video Wall (9 x 50")	Control & Processing	Compatibility with existing processor/control	Full compatibility with existing video wall processor and control system; no replacement of processing infrastructure required	
Emergency Command Centre	Video Wall (9 x 50")	Content Sources	Simultaneous content sources	Supports simultaneous display of live camera footage, broadcast/news feeds and presentation content	

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Emergency Command Centre	Video Wall (9 x 50")	Power Operation	Continuous power operation	Remains continuously operational; no automatic power-off; manual control retained for authorised operators	
Emergency Command Centre	Video Wall (9 x 50")	Warranty	Warranty and repair response	Minimum 5 years (parts, labour, panel defects) from installation; on-site repair/replacement applied to each of the 9 panels individually; like-for-like spare panels confirmed for warranty duration	
Emergency Command Centre	Standalone Screens (4 x 55")	Size & Quantity	Four standalone screens of equivalent size on existing brackets	Four (4) x 55" standalone screens mounted on existing wall brackets	
Emergency Command Centre	Standalone Screens (4 x 55")	Resolution	Screen resolution	4K UHD (3840 x 2160) minimum	
Emergency Command Centre	Standalone Screens (4 x 55")	Brightness & Contrast	Brightness and contrast	>= 500 nits, commercial-grade; contrast >= 4,000:1	
Emergency Command Centre	Standalone Screens (4 x 55")	Operation	24/7 continuous operation	Rated for 24/7 continuous operation	
Emergency Command Centre	Standalone Screens (4 x 55")	Panel Type & Inputs	Panel type and inputs	Commercial-grade LED-backlit LCD; HDMI 2.0/2.1, DisplayPort	
Emergency Command Centre	Standalone Screens (4 x 55")	Mounting & Integration	Bracket compatibility and standalone operation	Compatible with current bracket VESA pattern and weight rating; standalone operation, no AV control/distribution integration required	
Emergency Command Centre	Standalone Screens (4 x 55")	Power Operation	Continuous power operation	No automatic power-off; manual control retained for authorised operators	
Emergency Command Centre	Standalone Screens (4 x 55")	Warranty	Warranty and repair response	Minimum 5 years (parts, labour, panel defects); on-site repair/replacement per each of the 4 screens	
Meeting Room	Room Primary Display	Meeting Room Primary Display Size	Meeting Room Primary Display Size	Large Meeting Room Minimum size of 70 inches	
Meeting Room	Meeting Room Primary Display	Meeting Room Primary Display Size	Meeting Room Primary Display Size	Small Meeting Room Minimum size of 50 inches	
Meeting Room	Meeting Room Primary Display	Primary Display Resolution	Resolution	Minimum 4K resolution	
Meeting Room	Meeting Room Supplementary Display	Meeting Room Supplementary Display Size	Meeting Room Supplementary Display Size	Minimum size => 50 inches	
Meeting Room	Meeting Room Supplementary Display	Meeting Room Supplementary Display Resolution	Meeting Room Supplementary Display Resolution	Minimum 4K resolution	

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Meeting Room	All Equipment (for each piece of equipment)	Warranty	Warranty	Minimum five-year warranty, along with provisions for next-business-day repair and replacement services.	
Meeting Room	Meeting Room Display Operation	Meeting Room Display Operation	Meeting Room Display Operation	Sustain Operation exceeding 12 hours of continuous use each day	
Meeting Room	Meeting Room Display Operation	Display Automatic Power Off / On	Display Automatic Power Off / On	Programmed to automatically power off when not in use and to auto power on when in use.	
Meeting Room	Short-Throw Laser Projector	Light Source	Laser light source and lifespan	Solid-state laser; minimum rated lifespan 20,000-30,000 hours	
Meeting Room	Short-Throw Laser Projector	Brightness	Projector brightness	Minimum 4,000-6,000 ANSI lumens	
Meeting Room	Short-Throw Laser Projector	Resolution	Projector resolution	4K UHD minimum	
Meeting Room	Short-Throw Laser Projector	Throw Ratio	Short-throw ratio	0.22:1 to 0.8:1	
Meeting Room	Short-Throw Laser Projector	Contrast Ratio	Projector contrast ratio	Minimum 3,000:1	
Meeting Room	Short-Throw Laser Projector	Connectivity	Projector connectivity	HDMI (multiple ports), LAN, USB, Wi-Fi, HDBaseT and screen mirroring	
Meeting Room	Short-Throw Laser Projector	Lens Features	Zoom, lens shift and correction	Manual/digital zoom; lens shift (vertical +/-50%, horizontal +/-20%); keystone and corner correction	
Meeting Room	Short-Throw Laser Projector	Screen Size Support	Supported image size	50" to 200" or greater	
Meeting Room	Short-Throw Laser Projector	Integrated Audio	Built-in audio	Built-in speaker, minimum 10-15 W output	
Meeting Room	Short-Throw Laser Projector	Power & Noise	Power consumption and noise	280-350 W; noise below 38 dB (economy mode 27 dB or lower)	
Meeting Room	Projection Screen (ALR)	Type & Surface	ALR fixed-frame screen surface	Ambient Light Rejecting (ALR) fixed-frame screen; high-contrast angular-reflective surface compatible with 0.22:1-0.8:1 throw	
Meeting Room	Projection Screen (ALR)	Gain	Screen gain	0.8 - 1.2	
Meeting Room	Projection Screen (ALR)	Viewing Angle	Half-gain viewing angle	>= 160 deg half-gain viewing angle	
Meeting Room	Projection Screen (ALR)	Aspect Ratio	Aspect ratio	16:9, matched to 4K UHD source	
Meeting Room	Projection Screen (ALR)	Ambient Light Rejection	ALR rating	Minimum 0.6 ALR rating; preserves contrast under normal boardroom lighting without blackout	
Meeting Room	Projection Screen (ALR)	Frame, Mounting & Masking	Frame, mounting and masking	Fixed-frame, wall-mounted, tensioned, flat and wrinkle-free; black masking border 2"-3"	
Meeting Room	Projection Screen (ALR)	Fire / Safety Rating	Fire-retardant compliance	Screen material complies with applicable SANS fire-retardant standards	

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Meeting Room	Meeting Room Conferencing Equipment Installation	Native Microsoft Team Mode	Meeting Room Conferencing Equipment Installed in native Microsoft Native Teams Mode	Must be Teams Room Compliant	
Meeting Room	Meeting Room Conferencing Equipment Installation	HDMI Port	HDMI Port	A backup HDMI port must be provided on the table	
Meeting Room	Meeting Room Conferencing Equipment Installation	Power Port	Power Port	Power Port to be included in port	
Meeting Room	Conferencing Equipment	Microsoft Teams Environment	Interoperability and manageability via existing Teams environment	All conferencing equipment interoperable with, and fully manageable through, the existing Microsoft Teams environment	
Meeting Room	Conferencing Equipment	Management Mode	Comprehensive management-mode registration	All devices registered in comprehensive management mode per the Microsoft Teams compliance framework	
Meeting Room	Conferencing Equipment	Configuration Method	Configuration via Teams Manager only	All devices configured exclusively via Microsoft Teams Manager; manual, local or out-of-band configuration prohibited	
Meeting Room	Conferencing Equipment	Wireless Presentation	Wireless presentation device	Wireless presentation device incl. 1 additional dongle	
Meeting Room	Conferencing Equipment	Audio Coverage Sizing	Speaker/microphone sizing to room	Speaker and microphone quantity and placement sized to each room and seating capacity to ensure clear, consistent speech capture for all attendees	
Meeting Room	Meeting Room Door Display	Microsoft Teams Room Certified	Microsoft Teams Room Certified	Meeting Room Door Display must be Microsoft Teams Rooms Certified	
Meeting Room	Meeting Room Door Display	Connectivity	LAN and Wi-Fi	LAN and Wi-Fi as a network connectivity medium	
Meeting Room	Meeting Room Door Display	POE	POE	Support POE	
Meeting Room	Meeting Room Door Display	Booking Functionality	Book room at the door	Allows a room to be booked at the door, subject to availability	
Meeting Room	Meeting Room Door Display	Room Status Indication	Room status indicator	High-visibility RGB LED bars indicating room status	
Meeting Room	Meeting Room Door Display	Sensors	Embedded sensors	Embedded ambient light and proximity sensor	
Meeting Room	Meeting Room Door Display	Screen Finish	Screen coating	Anti-fingerprint screen coating	
Meeting Room	Meeting Room Door Display	Administration	Teams admin configuration	Configured as a Room Panel within the Microsoft Teams admin console	