TECHNICAL EVALUATION OF AUDIO VISUAL EQUIPMENTS

COMPARATIVE STATEMENT :

1. Name of Procuring Agency: University of Health Sciences Lahore
2. Method of Procurement: Single Stage Two Envelope Bidding Procedure under PPRA Rule 38, (2)(a)
3. Title of Procurement: Tender for procurement of audio/visual equipment with installation & configuration at the UHS (City campus & Jinnah campus)
4. Date & Time of Bid Closing: Sunday, 10-09-2023 at 11:00 AM
5. Date & Time of Bid Opening: Monday, 11-09-2023 at 11:30 AM
6. No. of bids received: 03

Sr #	Items with specifications		Qty	Bidder Co. Name 1 Orient A.V. (Pvt) Ltd.	Bidder Co. Name 2 World Wide Vision
Video Conferencing Room – UHS City Campus Lahore					
1	**86" Interactive Smart LED:**		1	Qualified	Qualified
	Screen Size	86"			
	Resolution	3840x2160 (4K)			
	Response Time	8ms			
	Display Color	1.07B colors			
	Brightness	350 cd/m2			
	Contrast Ratio	5000:1,			
	Touch Point	20 points			
	Ports	HDMI In, HDMI Out, VGA, RS232, LAN			
	USB	USB Type C (Touch, DATA, 65W power in one cable), USB Type, A, USB Type B			
	Speakers	2 x 10 watts			
	Android system	Android 11, 4GB 32GB			

	Screen sharing Dongle	Same brand Plug & Play HDMI and USB Type A connector's on single dongle for instant screen sharing on single click.		

	Video Conference PTZ Camera:				
2	Sensor	High Quality CMOS Sensor	1	**Qualified**	**Qualified**
	Resolution	1920×1080P@30 fps			
	Lens Zoom	12x Optical Zoom & 10x Digital Zoom			
	View Angle	72° Wide			
	Focus	Auto, Manual, One Push			
	Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve			
	Video Output	Simultaneously on HDMI, USB3.0, USB2.0, & LAN			
	Video Compression	H.265, H.264, MJPG			
	Control Port	RS232 & LAN			
	Pan/Tile Rotation	-170°~+170°, -30°~+ 90°			
	Preset Numbers	255 Presets			

Audio Conferencing System:

Main Controller

Fully digital Network based Conference System central control unit with built-in DSP sound processing.

The digital ring network technology to achieve full-digital signal transmission and processing.

One CAT5e cable to transmit up 64 channels audio and other signals.

High-fidelity sound quality by lossless audio transmission technology, 48K audio sampling rate and 20Hz ~ 20KHz frequency response

"Hand-in-Hand-Loop-Network" connection makes the system always working perfectly no matter changing discussion unit or having any malfunctioned units.

The sensitivity of the unit microphone and 8 segment equalizer EQ adjustment independently.

Conference controller can output 16 segment equalized EQ to achieve sound field adjustment; pressure limit, which can recognize the noise gate passed by human voice. AGC automatic volume gain control; AFC automatic feedback suppression and auto-mix technology.

Sound output by separated zones function, each zone is automatically adjusted according to the volume of the position of the microphone, achieve longer distances pickup without whistle.

	Echo cancellation, remote two-way real-time call with another conference controller or another third-party video conferencing terminal.	1	Qualified	Qualified
	USB recording, controller monitor, advanced noise cancellation technology to realize clearer recording.			
	Only wired discussion units can connect to the controller, fast and easily to adding delegate of meetings.			
	2 channel audio input, XLR or RCA type, for local audio input or remote video-conferencing input.			
	Maximum 8-channel audio output, XLR, RCA or Phoenix type, can be connected to simultaneous interpretation output or partitioned output.			
	RS232 central control, realize microphone switch, priority, volume and other controls.			
	RS232 to send the PELCO/VISCA protocol.			
	Hot plug-and-play, and auto-recovery function.			
3	"OPEN" Free for all, limited by the active units setting by controller，"VOICE" Can activate MIC by detecting sound without press button, "OVERRIDE" First in First out, "APPLY" To apply then to speak.			
	LCD display to show all the operations and results.			
	4-Way button for menu operate.			
	One-button press to start recording.			
	2x RJ45 digital audio connection, 2x RJ45 for chairman unit, delegate unit, unit translators and other connection, 1x RJ45 for wireless AP or router.			

Chairman Unit

CAT5 Wired Digital Basic Discussion Chairman Unit with 330mm Mic.				
The digital ring network technology to achieve full-digital signal transmission and processing.				
Stylish, low profile design with Built-in loudspeaker.				
Standard CAT5e and RJ45 connectors used to provide more convenient on project and maintenance.		1	Qualified	Qualified
Head-set interface in both sides with volume adjust.				
Line-in interface which allows microphone or other line-in device like cell phone, laptop to pass audio through to perform teleconference.				
Touchable button for MIC ON/OFF, Priority & Apply Answer button for chairman unit.				
2 x touch-sensitive president buttons with LED indicator				

Delegate Unit

CAT5 Wired Digital Basic Discussion Delegate Unit with 330mm Mic.	

			Qualified	Qualified
	The digital ring network technology to achieve full-digital signal transmission and processing.	14	Qualified	Qualified
	Stylish, low profile design with Built-in loudspeaker.			
	Standard CAT5e and RJ45 connectors used to provide more convenient on project and maintenance.			
	Head-set interface in both sides with volume adjust.			
	Line-in interface which allows microphone or other line-in device like cell phone, laptop to pass audio through to perform teleconference.			
	Touchable button for MIC ON/OFF.			
4	**Power Amplifier:** 120 Watt, mixing power Amplifier	1	Qualified	Qualified
5	**Wall Speakers:** 16 watt wall speakers	2	Qualified	Qualified
6	**Wireless Dual Microphones** Wireless Dual Channel Microphones (Cordless & Handheld)	1	Qualified	Qualified
7	**AV Controller:** An Ethernet-enabled control processor for the purpose of remotely controlling, monitoring and troubleshooting connected AV equipment and AV systems. Provide two RS-232 ports, Provide one RS-232/RS-422/RS-485 port. Provide two IR/Serial ports on processor. Provide four relays ports, Provide four digital I/O's on captive screw. Supports the creation of IR drivers by capturing IR commands from handheld remotes.	1	Qualified	Qualified
8	**Wall control button panel:** Customizable button panel ro integrate with AV Controller, Six dual-color, customizable, backlit buttons, Use a single button panel or combine multiple button panels to accommodate a broad variety of system designs, Volume control knob with LEDs for visual feedback.	1	Qualified	Qualified
9	**Occupancy Sensor:** Occupancy Sensor to be integrate with AV controller to automate the room AV equipment on room's occupancy. Dual technology US - Ultrasonic and PIR - Passive Infrared sensors provide a wide coverage area with excellent detection capabilities. Coverage Area 2,000 square feet.	1	Qualified	Qualified
10	**Conference base setup module** Basic software module consists of an amount of facilities, e.g. venue design, conference management, main unit configuration, contribution unit configuration, information display, system detection, system report, and user management.	1	Qualified	Qualified

11	**10" Tablet:** 10" Android tablet to be integrate with AV controller	1	**Qualified**	**Qualified**
12	**USB Hub:** USB HUB with 1 Host input along with USB ports for peripherals and HDMI port for display.	1	**Qualified**	**Qualified**
13	**Accessories:** Cabling and accessories of all kinds shall be included to make the system working in all respects.	1	**Qualified**	**Qualified**
14	**Installation and configuration:**	1	**Qualified**	**Qualified**

Workshop Room # 30 - UHS Lahore City Campus UHS

1	**98" Interactive Smart LED:**		1	**Qualified**	**Qualified**
	Screen Size	98"			
	Resolution	3840x2160 (4K)			
	Response Time	8ms			
	Display Color	1.07B colors			
	Brightness	350 cd/m2			
	Contrast Ratio	3000:1,			
	Touch Point	20 points			
	Ports	3xHDMI In, 1xHDMI Out, 1xVGA, 1xRS232, 2xLAN,1xWireless LAN			
	USB	USB Type C (Touch, DATA & power in one cable), USB Type, A, USB Type B			
	Speakers	2 x 16 watts			
	Sensors	Light sensor for auto brightness			
	Android system	Android 9, 4GB 32GB			
	Multiple Content Display	Simultaneous 4-way split wireless contents of multiple presenters			
	Screen sharing Dongle	Same brand Plug & Play HDMI and USB Type A connector's on single dongle for instant screen sharing on single click.			

2	**Video Conference PTZ Camera:**		1	**Qualified**	**Qualified**
	Sensor	High Quality CMOS Sensor			
	Resolution	1920×1080P@30 fps			
	Lens Zoom	12x Optical Zoom & 10x Digital Zoom			
	View Angle	72° Wide			
	Focus	Auto, Manual, One Push			
	Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve			
	Video Output	Simultaneously on HDMI, USB3.0, USB2.0, & LAN			
	Video Compression	H.265, H.264, MJPG			
	Control Port	RS232 & LAN			
	Pan/Tile Rotation	-170°~+170°, -30°~+ 90°			
	Preset Numbers	255 Presets			
3	**Audio Conferencing System:**		1	**Qualified**	**Qualified**
	Main Controller				
	Fully digital Network based Conference System central control unit with built-in DSP sound processing.				
	The digital ring network technology to achieve full-digital signal transmission and processing.				
	One CAT5e cable to transmit up 64 channels audio and other signals.				
	High-fidelity sound quality by lossless audio transmission technology, 48K audio sampling rate and 20Hz ~ 20KHz frequency response				
	"Hand-in-Hand-Loop-Network" connection makes the system always working perfectly no matter changing discussion unit or having any malfunctioned units.				
	The sensitivity of the unit microphone and 8 segment equalizer EQ adjustment independently.				
	Conference controller can output 16 segment equalized EQ to achieve sound field adjustment; pressure limit, which can recognize the noise gate passed by human voice. AGC automatic volume gain control; AFC automatic feedback suppression and auto-mix technology.				
	Sound output by separated zones function, each zone is automatically adjusted according to the volume of the position of the microphone, achieve longer distances pickup without whistle.				
	Echo cancellation, remote two-way real-time call with another conference controller or another third-party video conferencing terminal.				
	USB recording, controller monitor, advanced noise cancellation technology to realize clearer recording.				
	Only wired discussion units can connect to the controller, fast and easily to adding delegate of meetings.				
	2 channel audio input, XLR or RCA type, for local audio input or remote video-conferencing input.				

			Qualified	Qualified
	Maximum 8-channel audio output, XLR, RCA or Phoenix type, can be connected to simultaneous interpretation output or partitioned output.			
	RS232 central control, realize microphone switch, priority, volume and other controls.			
	RS232 or RS485 to send the PELCO/VISCA protocol.			
	Hot plug-and-play, and auto-recovery function.			
	"OPEN" Free for all, limited by the active units setting by controller "VOICE" Can activate MIC by detecting sound without press button, "OVERRIDE" First in First out, "APPLY" To apply then to			
	LCD display to show all the operations and results.			
	4-Way button for menu operate.			
	One-button press to start recording.			
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4	**Chairman Unit**	1	**Qualified**	**Qualified**
	CAT5 Wired Digital Basic Discussion Chairman Unit with 330mm Mic.			
	The digital ring network technology to achieve full-digital signal transmission and processing.			
	Stylish, low profile design with Built-in loudspeaker.			
	Standard CAT5e and RJ45 connectors used to provide more convenient on project and maintenance.			
	Head-set interface in both sides with volume adjust.			
	Line-in interface which allows microphone or other line-in device like cell phone, laptop to pass audio through to perform teleconference.			
	Touchable button for MIC ON/OFF, Priority & Apply Answer button for chairman unit.			
	2 x touch-sensitive president buttons with LED indicator			
5	**Delegate Unit**	12	**Qualified**	**Qualified**
	CAT5 Wired Digital Basic Discussion Delegate Unit with 330mm Mic.			
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	Head-set interface in both sides with volume adjust.			
	Line-in interface which allows microphone or other line-in device like cell phone, laptop to pass audio through to perform teleconference.			
	Touchable button for MIC ON/OFF.			
6	**Conference base setup Module**			

	Basic software module consists of an amount of facilities, e.g. venue design, conference management, main unit configuration, contribution unit configuration, information display, system detection, system report, and user management.	1	Qualified	Qualified
7	**Power Amplifier:** 120 Watt, mixing power Amplifier	1	Qualified	Qualified
8	**Wall Speakers:** 16 watt wall speakers	2	Qualified	Qualified
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15	**Accessories:** Cabling and accessories of all kinds shall be included to make the system working in all respects.	1	Qualified	Qualified
16	**Installation and configuration:**	1	Qualified	Qualified

Committee Room – UHS Jinnah Campus - KSK

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2	**Power Amplifier:** 120 Watt, mixing power Amplifier	1	**Qualified**	**Qualified**
3	**Wall Speakers:** 16 watt wall speakers	2	**Qualified**	**Qualified**
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5	**Accessories:** Cabling and accessories of all kinds shall be included to make the system working in all respects.	1	**Qualified**	**Qualified**

6	Installation and configuration:	1	Qualified	Qualified

Comparactive sheet prepared by: _____ (Purchase Cell)

It is hereby confirmed that aforesaid items are in compliance with required specifications. _____ (End User)

All bids were evaluated by the IT technical experts against the laid specifications and found satisfactory. IT technical Experts committee after reviewing all the BoQ's items, recommends to issue purchase order to lowest quoted bidder in two stages. In first stage only the base items will be deployed and upon successfull integration / deployment, IT team of UHS may recommmend to procure remaining items to enhance the system operation. Comparative statement (summary/detail) is being submitted to Technical Committee, UHS for further necessary action.

Mr. Imran Qureshi
Director IT, Punjab University (Technical Expert)

M. Mudassar Khan
Manager IT, UET Lahore (Technical Expert)

Mr. Farhan Ahmad
Joint Director, PITB Lahore (Technical Expert)

TECHNICAL COMMITTEE:

Technical committee met on _____ to consider the Technical Evaluation Report following single stage two envelope procedure submitted by IT Department. Three Bids received from which two bidders are qualified and one bidder is disqualified due to not meet mandatory criteria. All bids were technically evaluated according to BOQs and mandatory criteria. Technical Committee recommends to process further as per PPRA Rules 2014 (Amended).

Ali Fayaz Malik
Member

Dr. Munir Ahmed
Member

Dr. Asif Naveed
Member

Dr. Shah Jahan
Member

Shafique Hussain
Technical Officer

Dr. Uruj Zehra
Convener