HIGH COURT OF MADHYA PRADESH: JABALPUR

No. Reg (IT)(SA)/2022/1277

// CLARIFICATION //

Dated:13-10-2022

Sub:- The matter regarding to publish the clarification / reply of Pre-Bid meeting dated: 26th September, 2022 of the tender regarding Supply, Installation, Commissioning and Maintenance of Video Conferencing Equipments under buyback of old Video Conferencing Equipments installed at High Court of Madhya Pradesh and District Judiciary in the State of Madhya Pradesh.

Ref: - Pre-Bid Meeting dated: 26th September, 2022.

Reply / Clarification to the pre-bid queries

On the basis of queries submitted by the bidders, the detailed reply / clarification is prepared as per details given below:-

Quer y No.	Name of Bidder / Tender Reference (Section No. /Page No.)	Content of Tender Requiring Clarification	Query of the bidder / remarks of the bidder	Reply / clarification to the query /remarks by the High Court
1	31 of 46	S.No. 4, Video Input Should have at least 1 x HDMI/HDCI inputs to connect Full HD cameras.	We request the technical authority to modify the clause as below: "VC Endpoint should have minimum 3 x HDMI/HDCI/USB Inputs to connect Full HD cameras / document camera / visualizer"	Yes changed to Video Input Should have at least 2 x HDMI/HDCI/U SB inputs to connect Full HD cameras.
2	31 of 46	S.No. 4, Video Input Must have		Yes changed to Video Input

		HDMI/HDCI/US B inputs to connect two laptops /PC / Camera for presentations supporting upto 4K Resolution including	hence requesting the technical authority to modify the clause as below: "Must have	additional HDMI/HDCI/U SB inputs to connect one laptops /PC / Camera for presentations supporting upto 4K Resolution
3	32 of 46	S.No.6, Audio standards supported G.711, G.722, G.722.1, 64 kbps MPEG-4 AAC-LD standard must be supported.	As per published RFP, the clause is proprietary to a single OEM, we request the technical authority to modify the	to "G.711, G.722, G.722.1 / 64 kbps MPEG4 AAC-LD or better standard must
4	32 of 46	S.No. 17, Camera Minimum of 12X optical zoom and 5X digital zoom	As per published RFP, the clause is favoring to a single OEM, hence we request the technical authority to modify the clause as below: "Minimum of 12X Optical Zoom"	Yes changed to "Minimum of 12X Optical Zoom" or better.
5	33 of 46	S.No. 17,	We request the	Video Frame

		Camera 1920 x 1080 pixels progressive @ 60fps	technical authority to modify the clause as the same is contradictory with the published clause - S. No. 2, Video Frame Rate" "1920 x 1080 progressive @ 30fps or better"	1080 progressive @ 30fps or better"
6	33 of 46	-	below: "USB Pass through must support upto 1080p30fps video resolution without using external hardware/convertor to avoid any point	work with any PC Soft Client applications such as Webex, Google Meet, MS Teams, etc. All required
7	Section – VII 7. TECHNICAL SPECIFICATION S 31 of 46	SPECIFICATIO NS – "A" VC Endpoint Specifications, S. No- 3 Video Features point	J	No change. The vendor may quote better solution.

no. 3.

Video Features -The system must support wireless sharing option Endpoint supports wireless content sharing using multiple devices without the need of any application to be downloaded on end user devices. Additionally, the VC endpoint also supports content We annotation. the request technical authority modify to the clause as below to allow other leading OEMs participate in the RFP. "The VC System should have an inbuilt feature to support wireless content sharing from MacOS, Windows, Apple, Android tablets, and Smart Phones without downloading any applications on the user device. should also support content annotation capabilities when connected to touch display. If the same feature is not natively built into the VC codec, then an external third party system can be provided by the bidder to achieve

Page **5** of **36**

Section – VII 7. TECHNICAL SPECIFICATION S 31 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 16 46 Section – VII 7. TECHNICAL SPECIFICATION S 31 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 10 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 20 of 47 of				the same	
Section – VII 7. TECHNICAL SPECIFICATION S 31 of 46 Section – VII 7. TECHNICAL SPECIFICATION S 31 of 46 Section – VII 7. Searras. Section – VII 7. Section – VII 7. TECHNICAL SPECIFICATION S 31 of 46 Section – VII 7. Section – VII 7. TECHNICAL SPECIFICATION S 31 of 46 Section – VII 7. Section – VII 7. TECHNICAL SPECIFICATION S 31 of 46 Section – VII 7. Sec					
TECHNICAL NS - "A" VC proprietary to single to Video Input	8	TECHNICAL SPECIFICATION	NS - "A" VC Endpoint Specifications, S. No- 4 Video Input point no. 1 4. Video Input - Should have at least 1 x HDMI/HDCI inputs to connect Full HD	generation VC Endpoint supports multiple cameras to capture multiple people in the same room from different angles. As we can understand through current published RFP that the current requirement is for single camera at this point of time but it is recommended to invest / procure in a VC Endpoint having multiple camera capability for expansion of solution in near future. We request the technical authority to modify the clause as below to allow leading VC OEMs with VC Endpoint having multiple camera support from day one. "VC Endpoint should have minimum 3 x HDMI/HDCI/USB Inputs to connect	at least 2 x HDMI/HDCI/ USB inputs to connect Full
S Specifications, requesting the additional	9	TECHNICAL SPECIFICATION	NS – "A" VC Endpoint	proprietary to single OEM, hence	to Video Input Must have 1

	31 of 46	connect two	the clause as below to allow other leading OEMs participate in the RFP. "Must have 1 x HDMI dedicated input to share Content from PC/Laptop/Docume nt camera upto 4k15fps resolution"	HDMI/HDCI/U SB inputs to connect one laptops /PC / Camera for presentations supporting upto 4K Resolution including 1080p30fps or better.
10	Section – VII 7. TECHNICAL SPECIFICATION S 32 of 46	G.722.1, 64 kbps MPEG-4 AAC-LD		AAC-LD or
11	Section – VII 7. TECHNICAL SPECIFICATION S 32 of 46	SPECIFICATIO NS – "A" VC Endpoint Specifications, S. No- 15	The stated clause does not clarify the latest encryption standards. Hence requesting the	It should have minimum support AES-128 for end to end

		Encryption of Video Call 15. Encryption of Video Call - Call should be encrypted end-to end on IP	achieve the best possible encryption capability on VC Endpoint for IP calls. "Call should be encrypted end-to-end on IP for H.323 & SIP calls. It should support AES-128 and AES-256 standards for both H.323 & SIP."	Encryption or equivalent or better.
12	Section – VII 7. TECHNICAL SPECIFICATION S 32 of 46	SPECIFICATIO NS – "A" VC Endpoint Specifications, S. No- 17 Camera point no. 1 17. Camera - Minimum of 12X optical zoom and 5X digital zoom	12X optical zoom and 5X digital zoom is proprietary to single OEM, hence requesting the authority to modify the clause as below to allow other leading OEMs participate in the RFP. We request the technical authority to modify the clause to generic standard to allow other leading OEMs participate in the RFP. "Minimum of 10X Optical Zoom or more"	Yes changed to "Minimum of 12X Optical Zoom" or better.
13	Section – VII 7. TECHNICAL SPECIFICATION S 33 of 46	SPECIFICATIO NS – "A" VC Endpoint Specifications, S. No- 17 Camera point no. 2	The Sr. No-2 of the published RFP already defines the requirement of 1080p 30 fps Video Frame rate and its contradictory with the other points in	Yes changed to Video Frame Rate" "1920 x 1080 progressive @ 30fps or better"

		17. Camera - 1920 x 1080 pixels progressive @ 60fps	the RFP asked for 1080p 30fps hence requesting the authority to modify the camera resolution to be of same standard. We request the technical authority to modify the clause as below to allow other leading OEMs participate in the RFP. "1920 x 1080 progressive @ 30fps or more"	
14	Section – VII 7. TECHNICAL SPECIFICATION S 33 of 46	SPECIFICATIO NS – "A" VC Endpoint Specifications, S. No- 17 Camera point no. 5 Should have at least 70 degrees static field of view.	We request the technical authority to modify the clause to generic standard available with all leading VC OEMs. "Should have at least 65 degrees or more horizontal field of view."	No change. The vendor may quote higher side.
15	Section – VII 7. TECHNICAL SPECIFICATION S 33 of 46	SPECIFICATIO NS – "A" VC Endpoint Specifications, S. No- 19 User Interface point no. 1 19. User Interface - In order to provide a good user experience, the unit must be equipped with	the room. It is recommended to have Wireless Remote Control for the flexibility of controlling VC Endpoint functionalities from	Quote as per tender document. Touch screen panel is required by the High Court, but the facility of remote control may be added in the system as an optional item.

	an intuitive Touch Screen/Panel for controlling the VC unit.	the technical authority to modify the clause as below to allow other leading OEMs participate in the RFP. "The unit must be equipped with an intuitive Touch Screen Panel/Wireless Remote Control for controlling the VC unit."	
Section – VII 7. TECHNICAL 16 SPECIFICATION S 33 of 46	SPECIFICATIO NS - "A" VC Endpoint Specifications, S. No- 21 USB Pass Through point no 1 21. USB Pass through - It should be possible to connect the Codec to a PC/Laptop and Make use of Camera, Mic and Display to work with any PC Soft Client applications such as Webex, Google Meet, MS Teams, etc. All required licenses & accessories to be included as part of solution.	As asked solution is important and dependent on multiple factors like when connect the codec to a PC/Laptop and make use of Camera and Mic should be in sync with PC/Laptop Soft Client application such as Webex, Ms Teams, etc and the existing clause does not specify the video resolution during USB Pass	Yes changed to: It should be possible to connect the Codec to a PC/Laptop and Make use of Camera, Mic and Display to work with any PC Soft Client applications such as Webex, Google Meet, MS Teams, etc. All required licenses & accessories to be included as part of solution. And should support 1080p 30fps or better.

			Mode.	
			- All the solution	
			components must	
			be from the same	
			OEM for solution	
			stability USB	
			Pass through	
			Solution should be	
			possible to connect	
			directly with the	
			Codec and should	
			be possible to	
			Mute/ Unmute all	
			the microphones	
			and control camera	
			PTZ functionality	
			from the same	
			remote control /	
			touch control panel	
			during USB Pass	
			through mode	
			•	
			The solution should	
			be able to support	
			up to 1080p25fps	
			or more video	
			transmit in USB	
			pass-through	
			mode.	
		SPECIFICATIO	The Leading VC	
		NS – "A" VC	OEMs do not	
		Endpoint	support recording	
		Specifications,	on VC Endpoint	
		S. No- 22	due to security	
	Section – VII 7.	Recording	policies and hence	Optional. The
	TECHNICAL		not available as a	-
17	SPECIFICATION	22. Recording -	standard feature on	vendor may
	S	The Endpoint	VC Endpoint.	quote higher
	33 of 46	should support	•	side.
		recording in		
		local storage	. •	
		through USB or		
		equivalent	to allow leading	
		system from day	•	
		System nom day	O LIVIO Partiolpato III	

Page **11** of **36**

		1.	the RFP.	
18	Connectivity (Input)	DVI-D, Display Port; Video : - HDMI 2.0 (2) or above ; Audio: - Audio In ;USB : - USB 2.0 x 2	USB-1 or Higher, as no application of 2 USB in solution	Yes changed to : DVI-D, Display Port; Video : - HDMI 2.0 (2) or above ; Audio: - Audio In ;USB : - USB 1.0 x 1 or better
19	Connectivity (Output)	Audio : - Audio Out	Pls add DP Out -1 to take display out or mirroring, in future extension	DP Out-1 port is Optional .
20	Display/ Panel	Diagonal Size: - 55 inch; Type: - Edge LED BLU / IPS; Brightness (Typ.):- 350 nit or better; Contrast Ratio: - 1200:1 or better; Viewing Angle (H/V): - 178/178; Response Time (G-toG): 8ms (Typ.) or better; Colors Depth: - 1.06 Billion colors; Color Gamut: - 72%; Operation Hour:- 24/7; Haze:- 28 % or less than 28%	1100:1 as per IPS panel Brightness -	Yes changed to Diagonal Size: - 55 inch; Type: - Edge LED BLU / IPS; Brightness (Typ.):- 350 nit or better; Contrast Ratio: - 1100:1 or better; Viewing Angle (H/V): - 178/178; Response Time (G-toG): 8ms (Typ.) or better; Colors Depth: - 1.06 Billion colors; Color Gamut: - 72%; Operation Hour:- 24/7; Haze:- 28 % or less than 28%

Page **12** of **36**

21	Certification	Energy Star Certification / CB/ NRTL / FCC OR equivalent or better.	Pls make mandatory certificates to ensure good quality certificates Energy	No change
22	Support	Direct OEM support and service availability from day 1 at Jabalpur /Indore / Bhopal	Pls add Registration certificate of OEM Service center should be considered	Direct OEM support and service in the State of M.P. from day 1.
23	3, Section – I NOTICE INVITING TENDER	Time for Completion of the entire work / project = 60 days	clause to 90 days	No change
24	20, 4.8 TIME SCHEDULE TO COMPLETE THE CONTRACT:- point no.: 4.8.1	The successful bidder shall complete the assignment within 60 days from the date of contract.	to amend the clause to 90 days as the material availability from	No change
25	33, SPECIFICATION S – "B" Multi Direction Desk Micro Phone	It should be the same Model quoted by the vendor with VC End points as per Specification –A of the tender document.	As per the clause, it seems to be a typo error. It should be make instead of model in the clause as the model of each product (VC	Yes changed to: It should be the same Make and Model of "Multi Direction Desk Micro Phone" (Omni Directional) quoted by the vendor with VC End points as per Specification – A of the tender document.

			We request the technical authority	This Desk microphone will be used with VC Endpoint as an additional microphone (as per requirement.)
26	31 of 46, S.No. 4, Video Input	Should have at least 1 x HDMI/HDCI inputs to connect Full HD cameras.	to modify the clause as below: "VC Endpoint should have minimum 3 x HDMI/HDCI/USB Inputs to connect Full HD cameras / document camera / visualizer"	to Video Input Should have at least 2 x HDMI/HDCI/U SB inputs to connect Full HD cameras.
27	31 of 46, S.No. 4, Video Input	Must have 2 additional HDMI/HDCI/US B inputs to connect two laptops /PC / Camera for presentations supporting upto 4K Resolution including 1080p30fps or better.	We would like to clarify that Content can only be shared from one source at any point of time, hence requesting the technical authority to modify the clause as	Yes changed to Video Input Must have 1 additional HDMI/HDCI/U SB inputs to connect one laptops /PC / Camera for presentations supporting upto 4K Resolution including 1080p30fps or better.
28	32 of 46, S.No.6, Audio standards	G.711, G.722, G.722.1, 64	As per published RFP, the clause is	Yes changed to "G.711,

	supported	kbps MPEG-4 AAC-LD standard must be supported.	single OEM, we	G.722, G.722.1 / 64 kbps MPEG4 AAC-LD or better standard must be supported"
29	32 of 46, S.No. 17, Camera	Minimum of 12X optical zoom and 5X digital zoom	As per published RFP, the clause is favoring to a single OEM, hence we request the technical authority to modify the clause as below: "Minimum of 12X Optical Zoom"	Yes changed to "Minimum of 12X Optical Zoom" or better
30	33 of 46, S.No. 17, Camera	1920 x 1080 pixels progressive @ 60fps	We request the technical authority to modify the clause as the same is contradictory with the published clause - S.No. 2, Video Frame Rate" "1920 x 1080 progressive @ 30fps or better"	Yes changed to Video Frame Rate" "1920 x 1080 progressive @ 30fps or better"
31	33 of 46, S.No. 21, USB Pass through	It should be possible to connect the Codec to a PC/Laptop and Make use of Camera, Mic and Display to work with any PC Soft Client applications such as Webex, Google Meet, MS Teams, etc. All required	We request the technical authority to add the additional clause as below: "USB Pass through must support upto 1080p30fps video resolution without using external hardware/convertor to avoid any point of failure while	Yes changed to: It should be possible to connect the Codec to a PC/Laptop and Make use of Camera, Mic and Display to work with any PC Soft Client applications such as Webex,

		licenses & accessories to	Laptop.	Google Meet, MS Teams,
		be included as part of solution.		etc. All required licenses & accessories to
				be included as part of
				solution. And should support 1080p 30fps or better.
				Yes changed to Diagonal Size: - 55 inch ; Type: - Edge
		Display/ Panel: Diagonal Size: - 55 inch; Type: - Edge LED BLU / IPS; Brightness (Typ.):- 350 nit or better; Contrast Ratio: - 1200:1 or		LED BLU / IPS ; Brightness (Typ.):- 350 nit or better ; Contrast Ratio
32	34, Specification -C Smart TV/ Smart Display panel 55" point no. 6	better; Viewing Angle (H/V): -178/178; Response Time (G-to-G): 8ms (Typ.) or better; Colors Depth: -1.06 Billion colors; Color Gamut: -72%; Operation Hour:-24/7; Haze:-28% or less than 28%	1100:1 or better as this is the industry standard. This will allow leading OEM's to participate in the	Viewing Angle (H/V): - 178/178 ; Response Time (G-toG): 8ms (Typ.) or better; Colors Depth: - 1.06 Billion colors; Color Gamut: - 72% ; Operation Hour:- 24/7; Haze:- 28 % or less than 28%
33	34, Specification -C Smart TV/ Smart Display panel 55" point no. 6 Support	Direct OEM support and service availability from day 1 at Jabalpur / Indore	Registration certificate of OEM Service center should be	Direct OEM support and service in the State of M.P. from day 1.

Page **16** of **36**

		/ Bhopal		
34	33, SPECIFICATION S – "A" VC Endpoint Specifications Pt 22	Recording: The Endpoint should support recording in local storage through USB or equivalent system from day 1.	Please amend the clause as "Recording: The Endpoint should support recording in local storage through USB or cloud or equivalent system from day 1. We understand that MP Courts are using Cloud Based conferencing platform for meetings, please confirm if the video meetings can be recorded on the same meetings platform.	Optional. The vendor may quote higher side.
35	33, SPECIFICATION S – "A" VC Endpoint Specifications Pt 22	Additional Query	Please confirm if the VC Endpoints asked in the RFP should register with the Existing Cloud based Conferencing platform deployed at MP Courts. We request you to incorporate this feature so that the VC Endpoint share interpretable with the existing cloud based conferencing platform.	No change
36	33, SPECIFICATION S – "A" VC Endpoint Specifications Pt 22	Additional Query	Please confirm if the bidder needs to supply hardware /licenses for centralized VC Endpoint Management capabilities such as Remote software upgrades,	No change

			monitoring, troubleshooting and centralized phonebook services with the existing Cisco's cloud based meeting platform We request you to incorporate this feature so that the VC Endpoint share interpretable with the existing cloud based conferencing platform.	
37	33, SPECIFICATION S – "A" VC Endpoint Specifications Pt 22		Support - Direct VC Endpoint OEM support and service availability from day 1 at Madhya Pradesh (Jabalpur / Indore / Bhopal). We request you to add Direct VC OEM Support should have a Spare Depot in Madhya Pradesh for timely replacement. Moreover OEM Support for only Displays has been asked in Jabalpur / Indore / Bhopal.	Direct OEM support and service in the State of M.P. from day 1.
38	33, SPECIFICATION S – "A" VC Endpoint Specifications Pt 22	Additional Query	OEM of VC Endpoint OEM should be placed in Leaders Quadrant in the latest Gartner's Quadrant for Meeting Solution	No Change
39	33, SPECIFICATION S – "A" VC Endpoint Specifications	Additional Query	Please confirm if MP High Court needs User friendly features with the existing Cisco's	Optional

Page 18 of 36

	Pt 22		Cloud Meeting platform such as Mute/ Unmute Participants in a Meeting, Lock Meeting, Start/Stop/Pause Meeting recording, End the Meeting etc. We request you to incorporate this feature so that the VC Endpoint share interpretable with the existing cloud based conferencing platform.	
40	10, Section-II Pt 2.15 ELIGIBILITY/PR E- QUALIFICATION CRITERIA PT. 2.15.3	Experience in Supply, Installation, commissioning, Maintenance of installation of Computer Hardware of minimum last 5 years ending last day of month previous to the month of publication of this tender	Please amend the clause as "Experience in Supply, Installation, commissioning, Maintenance of installation of Video Conferencing Equipments (Hardware) of minimum last 5 years ending last day of month previous to the month of publication of this tender. As this tender is for "Supply, Installation and Maintenance of	No change

			and commissioning and will ensure	
			smooth completion of the crucial Project.	
41	11, Section-II Pt 2.15 ELIGIBILITY/PR E- QUALIFICATION CRITERIA PT. 2.15.3 [C]	Similar works means: Supply, Installation, Commissioning and Maintenance of Computer Hardware articles at Government Organization/ Public Sector Companies and reputed private organizations	As this tender is for	No change
42	34, SECTION-VII 7.TECHNICAL SPECIFICATION S:- SPECIFICATION "C" Smart TV/Smart Display Panel 55" S.No. 2	Connectivity (Input): DVI-D, Display Port; Video: - HDMI 2.0 (2) or above ; Audio: - Audio In; USB: - USB 2.0 x 2	Request to amend USB-1 or Higher, as no application of 2 USB in solution	Yes changed to : DVI-D, Display Port; Video : - HDMI 2.0 (2) or above ; Audio: - Audio In ;USB : - USB 1.0 x 1 or better
43	34,	Connectivity	Request to add DP	DP Out-1 port

Page **20** of **36**

	SECTION-VII 7.TECHNICAL SPECIFICATION S:- SPECIFICATION "C" Smart TV/Smart Display Panel 55" S.No. 3	(Output) :Audio : - Audio Out	Out -1 to take display out or mirroring in future extension	is Optional .
44	34 SECTION-VII 7.TECHNICAL SPECIFICATION S:- SPECIFICATION "C" Smart TV/Smart Display Panel 55" S.No. 6	Display/ Panel :Diagonal Size: - 55 inch; Type: - Edge LED BLU / IPS; Brightness (Typ.):- 350 nit or better; Contrast Ratio: - 1200:1 or better; Viewing Angle (H/V): - 178/178; Response Time (G-to-G): 8ms (Typ.) or better; Colors Depth: - 1.06 Billion colors; Color Gamut: - 72%; Operation Hour:-24/7; Haze:- 28% or less than 28%	Request to amend Contrast 1100:1 as per IPS panel Brightness -500 nits	Yes changed to Diagonal Size: - 55 inch; Type: - Edge LED BLU / IPS; Brightness (Typ.):- 350 nit or better; Contrast Ratio: - 1100:1 or better; Viewing Angle (H/V): - 178/178; Response Time (G-toG): 8ms (Typ.) or better; Colors Depth: - 1.06 Billion colors; Color Gamut: - 72%; Coperation Hour: - 24/7; Haze: - 28 % or less than 28%
45	34 SECTION-VII 7.TECHNICAL SPECIFICATION S:- SPECIFICATION "C" Smart TV/Smart Display Panel	Certification: Energy Star Certification / CB/ NRTL / FCC OR equivalent or better.	certificates to ensure good quality certificates Energy	No change

	55" S.No. 12			
46	34 SECTION-VII 7.TECHNICAL SPECIFICATION S:- SPECIFICATION "C" Smart TV/Smart Display Panel 55" S.No. 13	support and service	certificate of OEM Service center	Direct OEM support and service in the State of M.P. from day 1.
47	VC Endpoint specifications, page no. 31	Latest video standards H.264, H.265 or better. It should support H.323 and SIP for communication	Please consider the specification as "Latest video standards H.264. It should support H.323 and SIP for communication" As many OEM product do not support H.265 or better	No Change
48	VC Endpoint specifications, page no. 31	Must have 2 additional HDMI/HDCI/US B inputs to connect two laptops/PC/Cam era for presentations supporting upto 4K Resolution including 1080p30fps or better.	Please consider the specification as "Must have 2 additional HDMI/HDCI/USB inputs to connect two laptops/PC/Camera for presentations supporting upto 1080p30fps." As many OEM product do not support 4K content sharing.	No Change
49	VC Endpoint specifications, page no. 32	Standards based- Packet Loss Recovery feature	Please remove the same. As many OEM do not support the feature.	No change
50	VC Endpoint specifications, page no. 32	Should support Standards- based: H.235 v3 and AES Encryption via Automatic key generation and	Please remove the same. As many OEM do not support the feature.	Yes change to: Should support Standards- based: H.235 v3 and AES Encryption via

		exchange. The same should be available in a call with Video with presentation (dual video)		Automatic key generation / exchange. The same should be available in a call with Video with presentation (dual video) or better.
51		Automatic key generation and exchange	Please remove the same. As many OEM do not support the feature.	Yes changed to: Automatic key generation / exchange or better.
52	VC Endpoint specifications, page no. 32	System Management using HTTPS and SSH	Please consider the specification as "System Management using HTTPS and Telnet" As many OEM have telnet command line rather than SSH.	No change
53	VC Endpoint specifications, page no. 32	Should support Local and Global directories	Please consider the specification as "Should support Local" As many OEM have local directory support only.	No change
54		Should support LDAP and H.350 protocols for directory transfer	Please remove the same. As many OEM do not support the feature.	(Optional)
55	Video Standards	Latest video standards H.264, H.265 or better. It should support H.323 and SIP for communication.	Hence requesting you to consider H.264 HP (high profile)/H.265 as an option to make the specifications generic & open to participate for more OEMs/ Bidders. H.265 protocol is	No change

			only available with specific OEM. generic & open to participate for more OEMs/ Bidders.	
56	Video Features	The system must support wireless sharing option	Requesting you to consider Wireless/Wired content sharing option. Since wireless sharing has Unreliable and Transmission speed is comparably less while sharing content on wireless.	No change. The vendor may quote better solution.
57	Video Input	Must have 2 additional HDMI/HDCI/US B inputs to connect two laptops/PC/Cam era for presentations supporting upto 4K Resolution including 1080p30fps or better	Requesting to kindly consider 1x Additional ports HDMI/DVI/USB at 1080p@30 fps. At any point of time, the user can able to see any one content on the display. Hence there is no requirement 2x Additional inputs.	Yes changed to Video Input Must have 1 additional HDMI/HDCI/U SB inputs to connect one laptops /PC / Camera for presentations supporting upto 4K Resolution including 1080p 30fps or better.
58	Audio Inputs	Should support 3—Microphone inputs to connect 3 microphones. Two Mics should be provided day one. Microphones must be supplied with cables with length of atleast 10 meters.	Requesting you to consider 1 Microphone input which supports 4 microphones as to make the specs generic & more bidders/ OEMs can participate. This specs is leaning towards the single OEM, to make the specs generic & more	No change

Page **24** of **36**

			bidders/ OEMs can	
59	Encryption of video call	Automatic key generation and exchange	participate. Please change this point as 'Automatic key generation / exchange'. This specs is leaning towards the single OEM, to make the specs generic & more bidders/ OEMs can participate.	Yes changed to: Automatic key generation / exchange or better.
60	Directory services	Should support Local and Global directories	Please change this point as 'Should support Local / Global directories'. This specs is leaning towards the single OEM, to make the specs generic & more bidders/ OEMs can participate.	No change
61	User Interface	In order to provide a good user experience, the unit must be equipped with an intuitive Touch Screen/Panel for controlling the VC unit.	Requesting you to consider IR remote control for ease of operations & to make the specs generic. Requesting you to make it - 'the unit must be equipped with a Touch Screen/Panel/ IR Remote control.' Requesting you to consider IR remote control for ease of operations & to make the specs generic.	No change
62	General	General	Requesting you to confirm on the existing MCU usage, All new end	Quote as per tender.

			points should be connected with existing VC end points or we have to propose / supply with new MCU. If In case of supply of new MCU kindly provide with complete tender specifications for the same.	
			MCU is not been asked in the RFP/Bid. Whether the Client has existing MCU. If yes, then how many ports. If Not, then, Please provide tech. specs for new MCU.	
63	Eligibility	Similar works means: Supply, Installation, Commissioning and Maintenance of Computer Hardware articles at Government Organization/ Public Sector Companies and reputed private organizations.	Private Organization should not be included	No Change
64	Specification-B Multi Direction Desk Micro Phone	It should be the same Model quoted by the vendor with VC End points as per Specification —A of the tender document.	whether this Desk microphone will be used with VC Endpoint as an additional	Yes
65	32 of 46, Section – VII 7. TECHNICAL SPECIFICATION S	8. Audio Inputs: Should support 3 Microphone inputs to connect 3	Please consider 4 wireless Microphone as specifications are favoring single OEM and restricting	No change

Page **26** of **36**

	SPECIFICATION S-"A" VC Endpoint Specifications	microphones.	other manufacturers.	
66	33 of 46, Section – VII 7. TECHNICAL SPECIFICATION S SPECIFICATION – A" VC Endpoint Specifications	19. User Interface: In order to provide a good user experience, the unit must be equipped with an intuitive Touch Screen/Panel for controlling the VC unit.	must be equipped with an intuitive Touch Screen/Panel/Rem ote control for	Quote as per tender document. Touch screen panel is required by the High Court, but the facility of remote control may be added in the system as an optional item.
67	34 of 46, Section – VII 7. TECHNICAL SPECIFICATION S SPECIFICATION S-"C" Smart TV/ Smart Display Panel (55")	2. Connectivity (Input) : DVI-D, Display Port;	Please consider DVI/DP/HDMI for wider participation.	Yes changed to : DVI-D, Display Port; Video : - HDMI 2.0 (2) or above ; Audio: - Audio In ;USB : - USB 1.0 x 1 or better.
68	34 of 46, Section – VII 7. TECHNICAL SPECIFICATION S SPECIFICATION S-"C" Smart TV/ Smart Display Panel (55")	5. Smart TV Features: Content Management and Control and Monitoring Software (license by day 1), content playback without the need of media player,	Please consider Signage software with Content Creator, Content Manager and Content Player for wider participation.	No change
69	34 of 46, Section – VII 7. TECHNICAL SPECIFICATION S SPECIFICATION S-"C" Smart TV/ Smart Display Panel	8. Operating System: Tizen 4.0 (VD Linux) / web OS or equivalent or better	Tizen 4.0 (VDLinux) / webOS / Android or equivalent for wider participation.	Yes changed to: Operating System: Tizen 4.0 (VD Linux) / web OS / Android or equivalent or better.

Page **27** of **36**

	(55")			
70	34 of 46, Section – VII 7. TECHNICAL SPECIFICATION S SPECIFICATION S-"C" Smart TV/ Smart Display Panel (55")	12. Certification: Energy Star Certification / CB/NRTL / FCC OR equivalent or better.	Energy Star Certification / CB/ NRTL / FCC, BIS, CE, RoHS OR equivalent or better.	No change
71	34 of 46, Section – VII 7. TECHNICAL SPECIFICATION S SPECIFICATION S-"C" Smart TV/ Smart Display Panel (55")	13. Support: Direct OEM support and service availability from day 1 at Jabalpur / Indore / Bhopal		Direct OEM support and service in the State of M.P. from day 1.
72	11 of 46, 2.15.3	Similar works means: Supply, Installation, Commissioning and Maintenance of Computer Hardware articles at Government Organization/ Public Sector Companies and reputed private organizations.	Please clarify which items will be covered under Computer Hardware articles.	Computer Hardware articles means Computers, Servers, Printers, Scanners etc
73	Audio Input	Should support 3 Microphone inputs to connect 3 microphones. Two Mics should be provided day one. Microphones must be supplied with cables with length of atleast 10 meters.	Should support 3 Microphone inputs to connect 3 microphones. Two Mics should be provided day one. One microphone should be work as a base unit & the other two mic will connected to this by cable. Microphones base unit should be work	No change

			both wired & wirelessly, must be supplied with cables with length of atleast 10 meters.	
74	User Interface	In order to provide a good user experience, the unit must be equipped with an intuitive Touch Screen/Panel for controlling the VC unit.		Quote as per tender document. Touch screen panel is required by the High Court, but the facility of remote control may be added in the system as an optional item.

On the basis of queries of various bidders, the overall final technical specifications for compliance of the quoted products are updated / modified as under:-

REVISED SPECIFICATIONS - "A"

VC Endpoint Specifications

S.N o.	Features	Specifications	Specificatio n Changed in Clarification	Technica I complian ce YES/ NO (to be filled by bidder)
1.	Video Standards	Latest video standards H.264, H.265 or better. It should support H.323 and SIP for communication.		
2.	Video Frame Rate	Should support 30 fps with 1080p resolution for encode and decode of video		
3.	Video Features	Ability to send and receive two live simultaneous video sources in a single call, so that the image from the main camera and PC or document camera can be seen simultaneously.		

Page **29** of **36**

		Should support H.239 and BFCP protocols for content sharing over call.		
		The system must support wireless sharing option	The vendor may quote better solution.	
		Should have at least 1 x HDMI/HDCI inputs to connect Full HD cameras.	Video Input Should have at least 2 x HDMI/HDCI/ USB inputs to connect Full HD cameras.	
4.	Video Input	Must have 2 additional HDMI/HDCI/USB inputs to connect two laptops/PC/Camera for presentations supporting upto 4K Resolution including 1080p30fps or better.	Video Input Must have 1 additional HDMI/HDCI/ USB inputs to connect one laptops /PC / Camera for presentations supporting upto 4K Resolution including 1080p 30fps or better.	
		Should support the ability to view and share presentations at a resolution of 1080p30		
5.	Video Output	Should have at least 2 no.'s of HDMI output to connect Full High Definition display devices such as plasma and projectors for both Video and Content.(Dual Monitor Support). The codec should support connecting displays at resolution up to dual 4K displays.		
6.	Audio standards supported	G.711, G.722, G.722.1, 64 kbps MPEG-4 AAC-LD standard must be supported	"G.711, G.722, G.722.1 / 64 kbps MPEG4 AAC-LD or better standard must be	

Page **30** of **36**

			supported"
7.	Other Desirable Audio features	Noise Reduction, Automatic Gain control, Acoustic Echo Canceller,	
8.	Audio Inputs	Should support 3 Microphone inputs to connect 3 microphones. Two Mics should be provided day one. Microphones must be supplied with cables with length of atleast 10 meters. The pickup of the microphones should be at least 6 feet from the microphone. Echo Cancellation for every input must be available.	
9.	Audio Outputs	Should support audio output	
10.	Network Interfaces	1 LAN /Ethernet—10/100/1000 Mbps full duplex	
11.	Bandwidth	H323/SIP upto 6 Mbps point-to-point.	
12.	Network Capabilitie s	Packet Loss Based Down speeding	
13.	H.323/ IP Features	QoS—Diff Serve IP adaptive bandwidth management (including flow control) Auto Network Address Translation(NAT) support Standards based- Packet Loss Recovery feature System should support Ipv4 and Ipv6 from day one. Should support URL Dialling Support for H.245 DTMF tones in H.323	
14.	Menu Control	Password protected system menu	
15.	Encryptio n of video call	ITU-T standards based Encryption of the video call Call should be encrypted end-to-end on IP	It should have minimum support AES-128 for end to end Encryption or equivalent or

Page **31** of **36**

			better.
		Should support Standards-based: H.235 v3 and AES Encryption via Automatic key generation and exchange. The same should be available in a call with Video with presentation (dual video).	Should support Standards-based: H.235 v3 and AES Encryption via Automatic key generation / exchange. The same should be available in a call with Video with presentation (dual video) or better.
		Ability to manually turn encryption ON/ OFF should be there.	
		Automatic key generation and exchange	Automatic key generation / exchange or better.
16.	Managem ent	System Management using HTTPS and SSH	
		Minimum of 12X optical zoom and 5X digital zoom	"Minimum of 12X Optical Zoom" or better.
17.	Camera	1920 x 1080 pixels progressive @ 60fps	Video Frame Rate "1920 x 1080 progressive @ 30fps or better"
		Each camera should have minimum +15°/-15° tilt, +/- 90° pan	
		The Camera and codec should be from the same OEM.	The words:
		Should have at least 70 degrees static field of view.	The vendor may quote higher side.
18.	Directory services	Should support Local and Global directories	(Ontional)
		Should support LDAP and H.350	(Optional)

Page **32** of **36**

		protocols for directory transfer.	
19.	User Interface	In order to provide a good user experience, the unit must be equipped with an intuitive Touch Screen/Panel for controlling the VC unit.	Quote as per tender document. Touch screen panel is required by the High Court, but the facility of remote control may be added in the system as an optional item.
		Must have ability to browse the directory, search a contact, change layouts, mute/ un-mute, increase-decrease volume.	
20.	Inclusions	System should be supplied with 2 Nos of HDMI Cables for connecting displays, Camera Mounting Bracket	
21.	USB Pass through	It should be possible to connect the Codec to a PC/Laptop and Make use of Camera, Mic and Display to work with any PC Soft Client applications such as Webex, Google Meet, MS Teams, etc. All required licenses & accessories to be included as part of solution.	It should be possible to connect the Codec to a PC/Laptop and Make use of Camera, Mic and Display to work with any PC Soft Client applications such as Webex, Google Meet, MS Teams, etc. All required licenses & accessories to be included as part of solution. And should support

Page **33** of **36**

			1080p 30fps or better.
22.	Recording	The Endpoint should support recording in local storage through USB or equivalent system from day 1.	-
23.	OEM Warranty	The Solution must be under direct OEM warranty for period of 3 years which can be extended further on yearly basis.	

REVISED SPECIFICATIONS – "B"

Omni Directional Table Top Microphone

S.No.	Specifications	Description	Specification Changed in Clarification	Technical compliance YES/ NO (to be filled by bidder)
1.	Multi Direction Desk Micro Phone	It should be the same Model quoted by the vendor with VC End points as per Specification –A of the tender document.	It should be the same Make and Model of "Multi Direction Desk Micro Phone" (Omni Directional) quoted by the vendor with VC End points as per Specification — A of the tender document. This Desk microphone will be used with VC Endpoint as an additional microphone (as per requirement.)	

REVISED SPECIFICATIONS-"C"

Smart TV/ Smart Display Panel (55")

S. No.	Type / Particulars	Minimum Specifications	Specification Changed in Clarification	Technical Compliance (YES / NO) (to be filled by bidders)
1.	Resolution	3840 x 2160 (UHD)		
2.	Connectivity (Input)	DVI-D, Display Port; Video : - HDMI 2.0 (2) or above; Audio: - Audio In; USB: - USB 2.0 x 2	DVI-D, Display Port; Video : - HDMI 2.0 (2) or above ; Audio: - Audio In ;USB: - USB 1.0 x 1 or better	
3.	Connectivity (Output)	Audio : - Audio Out	DP Out-1 port is Optional .	
4.	Sound	Speaker Type: - Built in Speaker (10W + 10W)		
5.	Smart TV Features	Key Features: - UHD Signage Display Slim & Light Signage, Built in Wi-Fi, Internal Memory (8 GB), Content Management and Control and Monitoring Software (license by day 1), content playback without the need of media player, Auto Source Switching & Recovery, Anti-Glare, webRTC or equivalent.		
6.	Display/ Panel	Diagonal Size: - 55 inch; Type: - Edge LED BLU / IPS; Brightness (Typ.):- 350 nit or better; Contrast Ratio: - 1200:1 or better; Viewing Angle (H/V): - 178/178; Response Time (G-to-G): 8ms (Typ.) or better; Colors Depth: - 1.06 Billion colors; Color Gamut: - 72%; Operation Hour:- 24/7;	Diagonal Size: - 55 inch; Type: - Edge LED BLU / IPS; Brightness (Typ.):- 350 nit or better; Contrast Ratio : - 1100:1 or better;	

		Haze:- 28 % or less than 28%	Viewing Angle (H/V): - 178/178 ; Response Time (G-toG) : 8ms (Typ.) or better ; Colors Depth : - 1.06 Billion colors; Color Gamut: - 72% ; Operation Hour:- 24/7 ; Haze:- 28 % or less than 28%	
7.	Warranty	03 years from the date of installation		
8.	Operating System	Tizen 4.0 (VDLinux) / webOS or equivalent or better	Operating System: Tizen 4.0 (VD Linux) / web OS / Android or equivalent or better.	
9.	Remote Control Type	IR/RF/Bluetooth		
10.	Refresh Rate	60 HZ or better	_	
11.	Media Format	AVI, MPEG, WAV, WMA OR equivalent.		
12.	Certification	Energy Star Certification / CB/ NRTL / FCC OR equivalent or better.		
13.	Support	Direct OEM support and service availability from day 1 at Jabalpur / Indore / Bhopal	Direct OEM support and service in the State of M.P. from day 1.	

Note:-

- **1.** The specifications mentioned above are minimum and the vendor may quote equivalent or higher specifications.
- **2.** All the pages of the bid and Annexure are to be sealed and signed by the authorized officer/person of the company / bidder.

- **3.** The High Court of Madhya Pradesh has full rights to accept or reject any bid, without assigning any reason.
- **4.** The High Court of Madhya Pradesh have right to alter the scope of work as per the requirement.
- **5.** All Prospective bidders are requested to submit the bid with all relevant documents.
- **6.** The above clarifications / addendum are for all the prospective bidders' for tender reference and necessary action.
- 7. All future clarifications / corrigendum shall be made available in the official website of the High Court and Government etender portal.

Sd/-PRINCIPAL REGISTRAR (VIG.)