ಕರ್ನಾಟಕ ಸೋಪ್ಸ್ ಅಂಡ್ ಡಿಟರ್ಜೆಂಟ್ಸ್ ಲಿಮಿಟೆಡ್
(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಒಂದು ಉದ್ಯಮ)

Karnataka Soaps & Detergents Limited
(A Government of Karnataka Undertaking)

KSDL:DGM(M):2021-22:Engg: 728   Date: 29.04.2021

M/s. Connectivity IT Solutions Private Limited
#1877, 1st floor, 32st cross,10th main
Banashankari 2nd stage   **Work Order**
Bangalore-560070

Sub: Supply, Installation and commission of Video Conferencing system at KSDL, Bangalore complex.
Ref: 1. E-tender No: KSDL/2021-22/IND4711, dated 08-04-2021

With reference to the above We are pleased to entrust the above work at a total cost of **Rs.8,99,999/- (Eight Lakh Ninety Nine Thousand Nine Hundred and Ninety Nine Only) Inclusive of all** for Supply, Installation and commission of Video Conferencing system at KSDL, Bangalore complex.

<u>Scope of work for Video Conferencing system as follows:-</u>

1. Supply, Installation and commission of Video Conferencing system unit (cisco collaboration end point) @ Rs.6,64,300/- per no + GST@18% - Qty 1 Nos
2. LG Display @ Rs.90,723/- per no + GST@28% - Qty 1 Nos.
3. Detailed technical specification of video conferencing unit is enclosed
4. Any other miscellaneous work
5. Total amount should not exceed of **Rs.8,99,999/-(Eight Lakh Ninety Nine Thousand Nine Hundred and Ninety Nine Only) Inclusive of all**
6. You will have to make the statutory payment as applicable as per rules.
7. Warranty: 3 Years
8. Payment Terms: 30 Days credit from the date of receipt & acceptance of the material
9. Work Schedule : Two months from the date of work order issued i.e up to June-2021
10. Any repair works should be complete within 24 hours
11. Penalty clause: Any delay in Supply, Installation and commission of Video Conferencing system, Connectivity IT Solutions Private Limited will be charged 0.5% per week of the contract value with maximum of 5%.
12. During the execution of the work KSDL is not responsible for any type of damage or loss either to your men or materials.
13. During the execution of the work, if any, type of damages caused to KSDL property by your Employees / representatives the same will be recovered from your bill.
14. You have to start the work immediately and finish the same at earliest.

Kindly acknowledge the receipt of the same

Thanking you,

Yours faithfully,
For KARNATAKA SOAPS & DETERGENTS LTD.

Deputy Gen. Manager (Materials)

VIDEO CONFERENCE SPECIFICATIONS

No.	Description	Technical Specifications	Compliance (Y/N)
1	Package	The system should be a point to point system with Codec, HD 1080p camera, Mic. System should support controlling of codec and camera through Touch display. The system should come with required cables and power supply. The system should be capable of giving HD 1080p @60fps. The system should be upgradable to 1+3 HD Multisite VC by addition of license in future.	YES
		Codec and Camera must from the same OEM	YES
		Codec must be custom-built hardware and not software loaded on a PC.	YES
2	Video Standards and Resolutions	It should support H.323, SIP standards for communications.	YES
		It should support H.264, H.265 (or equivalent)	YES
		It should support 1080p 60 fps, 1080p 30 fps, 720p 60 fps and 720p 30fps	YES
3	Content Standards and Resolutions	It should support content sharing using standard based H.239 & BFCP. It should also support audio from PC used for content sharing.	YES
		Ability to send and receive two live simultaneous video sources @ 1080P in a single call, so that the image from the main camera and PC can be seen simultaneously.	YES
4	Audio Standards and Features	It should support G.711, G.729, G.722, AAC-LD or better	YES
		Automatic Gain Control and Automatic Noise Suppression	YES
5	Video and Audio Inputs	The VC Codec should have 3 x HDMI/HDCI input for connecting (1) Main HD camera (2) Secondary HD camera (3) Laptop/ PC for Content Sharing	YES
		2 x Microphone Inputs. 3 Mics to be supplied on Day1	YES
6	Video and Audio Outputs	2 x HDMI output for connecting main monitor & second monitor.	YES
		1 x Line out for Audio output	YES
7	Network Features	One Ethernet (RJ-45) 10/100/1000 for LAN Additional Ethernet (RJ-45) 10/100/1000 for LAN OR Wi-Fi 802.11a/b/g/n/ac 2.4 GHz/5 GHz	YES
		Must support IPv4 and IPv6 from day one on SIP and H.323.	YES
		H.323 and SIP bandwidth up to 6 Mbps	YES
		IPv4 and IPv6 support from day one	YES
		Auto Gatekeeper Discovery	YES
		IP Precedence, QoS	YES
		H.323 based Packet Lost Recovery	YES
8	Camera	Minimum of 5X zoom if the camera has 4K resolution OR Minimum of 10X zoom if the camera has 2K resolution	YES
		It should support 1080p60fps	YES
		Atleast 80° Horizontal Field of View	YES
		The camera/s should automatically detect active speakers in the conference	YES

		room. The camera/s should also have face detection mechanism to enable automatic framing of participants.	
		The camera should automatically detect who in the room is speaking and select the best camera framing for that person. And when no one is speaking it should automatically select the best group framing.	YES
		At least one Camera to be provided on Day1. Ability to add additional camera in future. Incase two cameras needed to meet the above requirement, the same should be provided	YES
9	Multisite Feature	The codec should be able to support up to 4 sites connectivity at 720p resolution or more. This feature should be available as a future upgrade option on the device.	YES
10	Security	Media Encryption (H.323, SIP): AES-128/AES-256	YES
		Authenticated access to admin menus, web interface and telnet API	YES
		Local account password policy configuration	YES
11	Experiences	Ability to share content from laptop at resolution of 4k locally	YES
		Ability to share content on wireless from Desktop or laptop without entering Codec IP	YES
		Should support Local/ Global /LDAP	YES
		The unit must be equipped with an intuitive Touch Screen/Panel for controlling the VC unit. Must have ability to browse the directory, search a contact, change layouts, mute/ unmute, increase-decrease volume, make/disconnect calls.	YES
12	Software based VC	Should have provision to create minimum 13 virtual rooms and 1 Webinar	YES
		Each Virtual Room should have capability to connect 1000 Participants of which 200 can be VC Units	YES
		Ability to provide Voice and Video connectivity over IP for a live session	YES
		Ability to allow users join the session over PSTN network	YES
		Ability for participants to get a call back over PSTN network for Audio	YES
		Ability to allow the host to call any user over PSTN	YES
		Active-speaker indicator and intelligent video switching; mute/unmute participants	YES
		Ability to provide High Quality video in full-screen view	YES
		Ability to have text chat in a live session	YES
		Ability to transfer file in a live session	YES
		Ability to join the Video Conference session from Android and iOS mobile application	YES
		Ability to join the Video Conference session from Windows and MAC PC application	YES
		Ability to share Desktop/Laptop Applications, Files or the entire screen on Real-time basis	YES
		The MCU should allow VC units to join over SIP URI and IP Address Dialling	YES
		Storage Recording should be on cloud based	YES
		VC Devices should be registered to cloud and managed from the same Portal	YES

OEM CRITERIA FOR VC CODEC

Sr.	OEM Clause	Compliance

No.		(Y/N)
1	OEM should be in the Gartner's leader's quadrant for Group Video Conference/ Meeting Solutions for atleast twice in last three consecutive years	Yes
2	OEM should be ISO 9000 certified	Yes
3	Proposed Device should support three years 8x5xNBD hardware replacement, with support for Twenty Four hour TAC support from OEM. It should be possible to raise a TAC case with the OEM without any dependency on Bidder or SI	Yes
4	OEM should have atleast 1 spare depot in Karnataka	Yes
5	Cloud MCU and VC Units should be provided by same OEM	Yes
6	OEM should be providing Video Conference solutions in India for more than 8 years	Yes
7	OEM should have atleast two reference projects of deploying more than 100 VC Endpoints for any of the Government departments in last three Years	Yes

DISPLAY UNIT FOR VC

No	Description	Technical Specifications	Compliance (Y/N)
1	Screen Size (Diagonal)	65-inch	YES
2	Technology	IPS Panel	YES
3	Resolution	3840x2160	YES
4	Broadcasting System	DVB-T2/C	YES
5	Brightness	350 or better nit	YES
6	Operation Hours	16/7	YES
7	Orientation	Landscape and Portrait	YES
8	Audio Output	10W + 10W	YES
9	Speaker System	2.0 ch	YES
10	Sound Sync	Bluetooth required	YES
11	Super-sign SW Compatibility	Content Management Software (CMS), Control and Monitoring Software (Control/Control+), Simple Editor	YES
12	Signage Feature	Crestron Connected® (Network Based Control), DPM (Digital Power management), Time scheduler, RTC (Real Time Clock), NTP sync timer, BEACON, Embedded CM (contents manager), Embedded GM (Group manager)	YES
13	Smart Feature	webOS 4.5 or equivalent, Smart Home (Launcher Bar), Web Browser, Pre-loaded App (YouTube only), Soft AP, WiFi (bandwidth), Screen	YES

		Share (Miracast), LG TV Plus App Compatibility, DIAL, Bluetooth Audio Playback, LG Sound Sync/bluetooth, Mobile Connection Overlay	
15	**Maintenance Feature**	USB Cloning, WOL, Diagnostics (Self Diagnostics (USB)), SI Compatible (TVLink Interactive)(TVLink Tuner), Simplink(HDMI-CEC)(1.4), IR Out (RS-232C , HDMI), Multi IR Code	YES
16	**Jack Interface**	Set Side - HDMI In 2(2.0), USB (2.0), CI Slot.	YES
		Set Rear - HDMI In (HDCP) 2.0, CI Slot, RF In, Digital Audio Out (Optical), RS-232C(D-Sub 9pin) (Control & Service), RJ45 (Usage Purpose) (Ethernet), External Speaker Out(3.5mm phone jack) 2 (Spk-out 1, 4W (Stereo, R: 2.0W, L: 2.0W, 8Ω) Vol. Control 1), Debug (Phone Jack Type) (Ext. SPK Volume Control Share)	YES
17	**Voltage, Hz**	100 ~ 240 V, 50/60 Hz	YES
18	**Power Consumption(Typ.)**	181.6W	YES
19	**Stand-by**	0.5W	YES
20	**Warranty**	3 Years	YES