



**Shreemati Nathibai Damodar Thackersey Women's University**

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**Invitation for Quotations  
for Purchase of  
Video Conference System  
at  
Teaching Learning Centre  
Department of Educational Technology  
SNDT Women's University  
Juhu Road, Santacruz West, Mumbai 400 049  
022-26602831**

**Ref No: TLC-DET/2019-20/web-note 2**

**Date: March 11, 2020**

Sealed Quotations are invited for purchase of **Video Conference System** to be installed at Teaching Learning Centre studio at **Juhu campus**. The suppliers are advised to study all technical and commercial aspects, instructions, terms and conditions carefully in the document. Failure to furnish all information required in the quotation may result in the rejection of the quotation. The University reserves the right to reject the quotation in whole without assigning any reason thereof.

<b>Name of Item</b>	<b>Quotation for Purchase of Video Conference System</b>
<b>Venue of Submission</b>	<b>Department of Educational Technology, SNDT Women's University, Juhu Road, Santacruz (West), Mumbai 400049</b>
<b>To be Addressed to:</b>	<b>Registrar, SNDT Women's University, 1, N.T. Road, New Marine Lines, Mumbai 400 020</b>
<b>Contact Telephone</b>	<b>022 – 2660 2831, 2660 4759</b>
<b>Deadline of submission</b>	<b>March 17, 2020</b>

**Instructions:**

*\*Dates mentioned here, are scheduled dates for the University Activities. Any changes in dates of submission and processing shall be notified in 'Tenders/Quotations' section on the University website (sndt.ac.in) below the respective quotation.*

To view Quotation Notice, kindly visit following website of **SNDT Women's University, Mumbai: [sndt.ac.in](http://sndt.ac.in)**

Quotations should clearly mention all Technical Specifications mentioned in this document.

The quotations are invited for the following products:

## **Video Conference System**

### **Specifications of Multiparty, Recording and streaming:**

Video Conferencing as a Service, VC SaaS

- Group video calls - (up to 25 way)
- concurrent conferences - minimum 10 users licenses supporting multipoint of up to 25 locations from the application from Laptop/desktop also should support one shared VMR with support of 25 way calling.
- Support service

Video & Tele-Conference System for multiway calling

1. Multipoint Calling Interface: VC SaaS, supports up to 25 participants joining on open standards H.323/SIP protocols in at least 10 parallel calls. Anyone can join call from a web browser (Chrome and Internet Explorer), a Mac or PC, a video system, or PSTN. Every user and meeting room is reachable by IP address, URI or telephone number, Every user can create meeting rooms, Full-screen presenter mode, Ability to mute audio/video, Optional security passcode, Centralized management of account and video systems, Usage reports and notifications, Multiple account manager support. Redundant Architecture providing the benefit of Geo- Redundancy. The solution should be hosted on data centres / platform having redundant and virtualized PoPs (point of presence) Globally with at least 1 Data Center in India. The solution should be a comprehensive video, audio bridge giving benefits like chat, presence, directory. The maximum participants in a call should be 25 participants in any combination of audio / video participants with business hours support. The complete solution should be encrypted on AES industry standards and hosted on a secured Data centre with GDPR (General Data Protection Regulation) Law
2. The Solution must offer optionally an audio bridging with India toll free number for audio only participants and should be unlimited use. Solution should also be capable of working as an independent audio bridge without any Video participants. The Dialling number should be available in at least 50 countries without any additional usage cost to customer
3. The solution must provide support for a Microsoft® Outlook Add-in and Google Calendar Chrome Extension.
4. The solution must be interoperable and work with video systems and infrastructure from the following manufacturers
  1. Avaya
  2. Cisco
  3. Microsoft® Lync®, Lync® Online
  4. Lifesize
  5. Polycom®
  6. Radvision®

- User Friendly - The solution should be user friendly offering benefits such as presence, directory of other end points or users, automatic software and firmware updates, Calendaring and health updates for endpoints registered with the service.
- Dialing Pattern - the solution shall support both Dial-out and Dial-in to other users, end points, Public IPs, URLs. During a point-to-point call an end or a user shall be able to add 3rd or up to 25 participants in the same call to make it a multiparty conference without disconnecting original call. Similarly, a user shall be able to dial or join an on-going PTP or multiparty conference. All required and existing end points should be able to escalate a PTP call to Multipoint to up to 25 locations.
- OEM Support - the bidder should provide Support. While customer can also reach OEM directly for telephonic technical support with business hours support
- Call Capability - As per the BOQ, 10 conferences should be able to make concurrent calls. So, the solution should be able to offer at least 10 or more conference calls at the same time each with 25 locations (on H323 or Open SIP) in Full HD quality.
- Recording - Facility to record the meetings at Full HD with single click from endpoint and user should be provided with 10 hours of storage archival and should be General Data Protection Regulation compliant.
- Streaming - The same video call can be escalated to a streaming call (without disconnecting the original multipoint call) to up to 150 viewers
  - Should be scalable to 10,000 viewers in future
  - Users should join via browsers itself without any plugins
  - The system must instantly make MP4 recordings available in meeting attendee personal libraries directly following a Live Stream event.
  - The system must be capable of dynamically recording the video and presentation feeds.
  - Live Stream must support real-time Q&A with option to moderate and approve individual questions or automatically approve all.
  - When the Live Stream is enabled and recording, the recording indicator must be shown on the video system, but this indicator must not be present in the recorded video content.
  - The recording must be available for on-demand viewing immediately after the recording has completed. (Record & Share required)

### **OEM Criteria and minimum qualification**

1. The OEM & VCSaaS provider should be an experienced player with Global presence, data center footprints, and working for more than a decade in Video Collaboration industry
2. The entire solution of Codec and SaaS should be from same OEM for ease of use and avoid any interoperability challenges.
3. The OEM / VCSaaS provider should be recognised by any one of international analyst journals like Gartner, Frost & Sullivan in any of past 3 years
4. The OEM should be serving at least 1500+ global customers and 150+ Indian customers
5. The OEM should have GDPR compliance

### **Specifications**

1. The video conference system must support an active schedule mode
  - a Meetings directory linked back to a central infrastructure
  - a large (up to 100,000 entries) corporate directory
2. Directory must be easily searchable through remote control
3. The video codec shall support the following at a minimum:
  1. 1920x1080 resolution

- a. With Progressive Scan @ 60 frames per second
  - b. With Progressive Scan @ 30 frames per second
2. 1280x720 resolution
4. With Progressive Scan @ 60 frames per second
5. The video conference system shall utilize a minimal consumption of bandwidth of 768 kbps when supporting 720p at a full 30 frames per second
6. The video conference system must support a minimum of two external Full HD displays, 1920x1080p, for a crystal-clear picture and data-sharing
7. The video conference system must have automatic noise reduction, automatic gain control and echo cancellation
8. The video conference system shall support
  - a minimum of 10 camera presets
  - a Full HD PTZ 10x optical zoom camera
  - both H.323 and SIP
9. The video conference system must have high-definition audio from 90 Hz up to 22 kHz
10. The video conference system must support full duplex audio for natural conversations one-touch easy recording with a recording indicator
11. The video codec shall support recording of video, audio and presentation to an external appliance. The codec should support either MPEG4 or H.264 video standards. When recording using MPEG4, the recording appliance should not be seen to be a participant in the call, but shall provide a simple recording notification on screen for all participants during the call
12. The video conference system must support
  - dial-in recording, dial-out recording
  - auto-discovery address/directory lookup
  - IP-PBX registration in Integrated Mode
  - single and dual microphone options
  - NAT/firewall traversal (H.460/SIP)
  - SNMP
13. The video conference system must have backup and restore functionality
14. The video conference system shall support two possible sources of video input
15. The video conference system shall support
  - high bandwidths up to a maximum of 6 Mbps
  - low bandwidths down to a minimum of 128 kbps
16. The video conference system must have the ability to disable SSH, HTTPS and Telnet services
17. The video conference system must support an easy, out-of-box setup wizard that allows the endpoint to run standalone or paired to the Cloud service
18. The video conference system must have granular auto bandwidth detection
19. The video conference system must support forward error correction
  - Adaptive Motion Control
  - three-way audio in order to maintain speech possibility during play of an external video
  - single cable HDMI connectivity to an HD display
20. The video codec shall provide support for sending and receiving two separate streams simultaneously in either a point-to-point call or multipoint calls. The dual streams supported shall be at a minimum:
  - a. 1080p30 and 1080p30
  - b. 720p60 and 720p30

21. When experiencing packet loss, the codec should first attempt to drop the resolution of the call and maintain the frame rate
22. The video codec should support the following audio and video standards: H.263, H.263+, H.264, G.711, G.722, G.722.1c, MPEG4-AAC-LC
23. The video codec should support audio input via a standard 3.5mm audio jack
24. The video codec should support a fast Ethernet interface
25. The video codec should be controllable via:
  - a. The central console accessory
  - b. A supplied infrared remote control & through touch control along with integrated speakers and microphones supplied along with VC endpoint ( the touch control should be from the same OEM)
  - c. A web-based interface
26. The video codec should support secure calling with 128b AES encryption using H.235 or SRTP/TLS, including strict compliance
27. The video conference system must support Do Not Disturb mode prior to a call and in-call modes
28. The video conference system must support video mute
  - Per location 3 MBPS Internet link for Video conference over cloud
  - Point to Point call minimum BW is 2 MBPS & maximum 6 MBPS for good quality

The quotations are invited in two parts under Three Envelop System. Technical envelop shall be enclosed and sealed in envelop No.1. Schedule of Rates shall be filled in and enclosed in Envelop No.2. Both the sealed envelopes shall be kept in Envelop No.3 which shall be big enough to contain two envelopes. On each envelop name and address along with contact number of bidder shall be written. On the top of it envelop name of the bidder should be mentioned.

**Envelop No.1:**

**The envelope must contain:**

1. Covering letter with details of bidders, address, name of proprietor, telephone number, mobile number, email ID, name, signature and seal. In case of partnership firm- name and address of the partners and copy of Partnership Deed.
2. Type of business entity : manufacturer/authorized dealer, any others (to be specified)
3. Certified copy of GST registration
4. PAN Card No
5. List of main clients (maximum 10)

**Envelop No.2:**

**The envelope must contain:**

The financial bid may be submitted in the prescribed format as above on the letterhead of the bidder.

Item	Rate per unit (INR)	Taxes (INR)	Qty (total 1)	Total Estimated Cost (INR)
1.				

The rate must be inclusive of all charges. Taxes are to be mentioned clearly in the quotation.

The final quantity may vary at the time of issue of purchase order.

Free delivery, installation is required at the eLearning studio, Department of Educational Technology, SNDT Women's University, Juhu.

The rate validity will be upto 45 days from the date of submission deadline.

All necessary documents, manuals to be handed over to the concerned department, Juhu campus.

Packing and transport charges, transit insurance will be inclusive in the quoted rate.

University will issue Octroi Exemption certificate if required.

Registrar,  
SNDT Women's University,  
Mumbai