

### SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN

Invitation to Bid

The Securities and Exchange Commission of Pakistan invites sealed tenders from well reputed and authorized partners/dealers/ distributors registered with sales tax department and having national tax number (NTN) based in Pakistan for

## "Supply and Installation of Video Conferencing Equipment/Facility"

The relevant details plus terms and conditions may be obtained from the undersigned personally or by visiting the SECP website: www.secp.gov.pk/Procurement.asp

The sealed bids with 2% earnest of the total quoted cost, must reach the undersigned through courier or may be dropped in the tender box on the ground floor of the NICL Building. The tenders must be received on June 20, 2014 by 1500 Hrs and will be opened on the same day at 1530 Hrs.

M. Ubaidullah Khalid – Assistant Director (Admin) 4th Floor, NICL Building, 63 Jinnah Avenue, Islamabad Tel: 9207091-4 Ext 107

### **Terms and Conditions for Bids and Bidders**

## 1. Tender Identification Number: TENDER # 27 / 13-14.

- 2. Bids are invited for "Supply and Installation of Video Conferencing Equipment/Facility" through SINGLE STAGE ONE ENVELOP METHOD.
- 3. The Procurement Agency is:

### Securities and Exchange Commission of Pakistan

4th Floor, NICL Building, 63 Jinnah Avenue, Blue Area, Islamabad.

- 4. Relevant details plus terms and conditions of the tender may be obtained from the undersigned personally or by visiting the SECP website: www.secp.gov.pk/Procurement.asp
- 5. The right to accept, reject and cancel any offer without assigning any reason is hereby reserved. The SECP's decision will be final and binding in all matters relating to this tender.
- 6. The SECP is not bound to accept the lowest bid and reserves the right to accept full or partial supplies offered and bidders should supply the same at the rates finalized between the agency and the bidder.
- 7. The bid validity period shall be 150 days.
- 8. The amount of the bid and earnest money shall be in Pak rupees. The bids should be accompanied by earnest money (refundable) for an amount equal to 2% of the total quoted price (inclusive GST, if applicable) in shape of either pay order, demand draft valid for not less than 6 months in favor of Securities and Exchange Commission of Pakistan, 4th Floor, NICL Building, 63 Jinnah Avenue, Blue Area, Islamabad. The tenders not accompanied by earnest money or with less amount of earnest money may not be entertained.
- 9. If the tender is withdrawn before the expiry of its validity or the supply/services are not made/provided within due date, the earnest money will be forfeited in favor of the SECP, Islamabad.
- 10. It is of utmost importance that bids should be submitted very carefully and the instructions set forth above, scrupulously complied with, failing which the offer will be ignored.
- 11. The language of the bid is English and alternative bids shall not be considered.
- 12. Amendments or alterations/cutting etc., in the bids must be attested in full by the person who has signed the bids
- 13. The prices quoted shall correspond to 100% of the requirements specified. The prices quoted by the bidder shall not be adjustable. Changes or revisions in rates after the opening of the tender will not be entertained and may disqualify the original offer.

- 14. The rates must be quoted strictly in accordance with our documents and Annex(s). In the event of non-acceptance of offer no intimation will be given to the individual bidder.
- 15. Discounts (if any) offered by the bidder shall be part of the bid.
- 16. The interested firm/company must have regular place of business, telephone numbers and email address and must provide proof of their existence in the particular business, for not less than 1 years and proof of company as legal entity.
- 17. The proof of firm/company's existence as a legal entity and an affidavit that the company is not blacklisted by any organization must be presented with the bids.
- 18. A copy of authorized agency/partnership/dealership/distributorship certificate from their principals is to be submitted with the tender.
- 19. The bidders do not have the option of submitting their bids electronically. Telegraphic and conditional bids will not be accepted. Unsealed bids will not be entertained.
- 20. The earnest money of successful tenders will be retained and that of other bidders will be returned.
- 21. Equipment / services supplied shall be duty and taxes paid in all respects. Detail of taxes charged shall be mentioned clearly.
- 22. The place of destination is: Securities and Exchange Commission of Pakistan, 4th Floor, NICL Building, 63 Jinnah Avenue, Blue Area, Islamabad.
- 23. The envelopes shall bear the following additional identification marks:

Bid for:	"Supply and Installation of Video Conferencing
	Equipment/Facility"
Firm Name:	XYZ Firm
Attention:	Assistant Director, Admin, 4th Floor
	NICL Building, 63 Jinnah Avenue
	Blue Area, Islamabad

24. The deadline for the submission of bids is:

**Date: June 20, 2014** Time: 1500 Hrs

25. The bid opening shall take place at:

Securities and Exchange Commission of Pakistan 4th Floor, NICL Building, 63 Jinnah Avenue, Blue Area, Islamabad Date: June 20, 2014 Time: 1530 Hrs

26. A statement "Not to be opened before 1530 Hrs on June 20, 2014" shall be clearly mentioned on the top of the sealed bid.

- 27. The bids received after the due date and time will not be entertained.
- 28. SECP reserves the right to relax any condition as per its requirement.
- 29. The SECP reserves the right to amend/change/revise the TORs of tender if deemed necessary. The successful bidder shall have to provide the services accordingly.

#### Note:

• The attachment details are as under

1.	<b>Terms of Reference</b>	Annex "A"
2.	<b>Evaluation Criteria</b>	Annex "B"

• If the above terms and conditions are acceptable then bids must be submitted well in time and according to the requirements.

## **Details of Required Equipment are as under:**

# Technical Specifications for VC Equipment (Cisco SX-20 or Equivalent) (Qty=01)

Application Features <ul> <li></li></ul>		Multimedia and presentations can be shared at the touch of a button
• High-definition content sharing up to 1080p80 resolution           • One button to push (OBTP) to start a meeting           • Prentium resolution (1000p60)           • H 323/SP calls up to 6 Mpps           • Built in Individuily transcood multipoint conferencing offers ability to add three additional participants           • Easy provisioning and self-configuration with Unified Communications Manager (CUCM), VCS.           Multi-way features, recording and streaming, and frevall travesta services           • Unified Communications Manager native support (requires Unified Communications Manager           Optional components         • Codee, Precision-HD Camera - (1000p452x) or 1000p12x)           • Unified Communications Manager native support (requires Unified Communications Manager           • Order, Precision-HD Camera - (1000p452x) or 1000p12x)           • Codee, Precision-HD Camera - (1000p452x) or 1000p12x)           • Order Standards         • 1232 and SP up to 6 Mbps           • Minimum Bandwidth         • 1232 and SP up to 6 Mbps           • Video Standards         • 1423, H283, H284           • Video Standards         • 1283, H284           • Video Native 16.9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout           • Multi-Wolf Multi and One DVI-I (Analog and Digita): Supported Formats.           • Video Standards         • Native 16.9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout		Basic API available over IP (Telnet or Secure Shell Protocol - SSH)
<ul></ul>	Application Features	• Dual-display
Performance Features              • Premium resolution (1080p60) • H.323/SIP calls up to 6 Mbps            • Built-in individually transcoder multipoint conferencing offers ability to add three additional participants • Easy provisioning and self-confuguration with Unified Communications Manager (CUCM), VCS. Multi-way features, recording and streaming, and firewall traversial services           Default components              • Codec, Precision-HD Camera - (1080p4x82 or - 1080p12x) 2x Table Microphone, remote control, cables, and power supply            Optional components              • Touch 8, Wall mount kit • H.323 and SIP up to 6 Mbps            Minimum bandwidth for resolution/f/mam ration bits with the second screen layouts, intelligent video management, Local auto-layout            Video Standards              • H.283, H.284, H.284            Video Standards              • H.283, H.284, H.284            Video Nature (You Inputs (You Inputs)               One HDMI and One DVH (Analog and Digital): Supported Formats.            Video Output              Two HDMI One DVH (Analog and Digital): Supported Formats.            Video Output              Two HDMI Output Supported Stands, 1022 mtr285, 11520e4, 1152:m64, 1152:m64, 1220:m720, 1280:m720, 1280:m72		High-definition content sharing up to 1080p30 resolution
Performance Peatures <ul> <li>H.3.22/SIP calls up to 6 Mbps</li> <li>Easy provisioning and self-configuration with Unlifed Communications Manager (CUCM), VCS.</li> <li>Multi-way features, recording and streaming, and firewail traversal services</li> <li>Unlifed Communications Manager native support (requires Unlifed Communications Manager)</li> <li>Unlifed Communications Manager (CUCM), VCS.</li> <li>Multi-way features, recording and streaming, and firewail traversal services</li> <li>Unlifed Communications Manager (CUCM), VCS.</li> <li>Multi-de Communications Manager (CUCM), VCS.</li> <li>Vanch 8, Wall mount kit</li> <li>Eandwidth</li> <li>H.233 and SIP up to 6 Mbps</li> <li>Touch 8, Wall mount kit</li> <li>Path 8, V20p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps</li> <li>rate</li> <li>Video Standards</li> <li>H.263, H.264</li> <li>Video Features</li> <li>Native 16:9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout</li> <li>Video Mador, 720 whold, 720 v570, 780 000 kBud, 102 v570, 780 800 fox 788, 1520 FL, 1520 eBu, 1520 v570, 1280 v</li></ul>		One button to push (OBTP) to start a meeting
Performance Features         • Bulk-in individually transcoded multipoint conferencing offers ability to add three additional participants           • Easy provisioning and self-configuration with Unified Communications Manager (CUCM), VCS.           Multi-way features, recording and streaming, and firewalt traversal services           • Unified Communications Manager native support (requires Unified Communications Manager           • Codec, Precision-HD Camera - (1080p4sS2 or - 1080p12x)           2x Table Microphone, remote control, cables, and power supply           Optional components         • Touch 8, Wall mount ki           Bandwidth         • H.323 and SiP up to 6 Mbps           Minimum bandwidth         • T20p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps           Video Standards         • H.203, H.203, H.204           Video Inputs (Two Inputs)         • Nalive 16.9 widescrean, Advanced screen tayouts, Intelligent video management, Local auto-layout           Video Nutput         • Nalive 16.9 widescrean, Advanced screen tayouts, Intelligent video management, Local auto-layout           Video Nutputs         • Nalive 16.9 widescrean, Advanced screen tayouts, Intelligent video, 1920;720, 1280;1152;464, 1280;720, 1280;100;40, 120;720;400;720;720;400;720;720;400;720;720;400;720;720;400;720;720;400;720;720;400;		Premium resolution (1080p60)
Preduting Pressure         easy provisioning and self-configuration with Unified Communications Manager (CUCM), VCS.           Multi-way features, recording and streaming, and firewall traversal services		• H.323/SIP calls up to 6 Mbps
i casy individual and serie-oninguiation with Online Continuitations warage (CoCut), VCS.                 Multi-way features, recording and streaming, and firewalt reversal services                 Default components               Codec, Precision-HD Camera - (1080p4xS2 or - 1080p12x)                 Default components               Codec, Precision-HD Camera - (1080p4xS2 or - 1080p12x)                 Default components               Touch 8, Wall mount kit                 Bandwidth               H.323 and SIP up to 6 Mbps                 Minimum bandwidth               r.20p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps                 Video Standards               r.20p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps                 Video Standards               r.20p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p20 from 2560 kbps                 Video Standards               r.20p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p760 hong 2560 kbps                 Video Standards               r.20p30 from 768 kbps, 720p60, 1380 x780, r400xr00, 1800 x780, r400xr00, 1800 x720xr00, 1280 x720x r80, r400xr00, 1800 x720xr00, 1280 x720x80, 128	Performance	Built-in individually transcoded multipoint conferencing offers ability to add three additional participants
• Unified Communications Manager native support (requires Unified Communications Manager                 Default components               • Codec, Precision-HD Camera - (1080p4xS2 or -1080p12x)                 Definal components               • Touch 8, Wall mount kit                 Bandwidth             • H 323 and SIP up to 6 Mbps               • F20p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps                 Video Standards               • 720p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps                 Video Standards               • 720p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps                 Video Features               • Native 16:9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout                 Video Features               • One HDMI and One DV-I (Analog and Digital): Supported Formats.                 Video Output               • 0ne UDMI Outputs Supported Formats.                 Tox 1080 @ 60 fors (1080p60), 1280 x 788, 400x (1080x40), 1280 x 720 @ 60 fps (720p60), 1280 x 788 @ 60 fps (WXGA), 1280 x	Features	• Easy provisioning and self-configuration with Unified Communications Manager (CUCM), VCS.
Default components         • Codec, Precision-HD Camera - (1080p4x52 or - 1080p12x)           2x Table Microphone, remote control, cables, and power supply           Optional components         • Touch 8, Wall mount kit           Bandwidth         • H.323 and SIP up to 6 Mbps           Minimum bandwidth         • H.323 and SIP up to 6 Mbps           Minimum bandwidth         • F.323 and SIP up to 6 Mbps           Video Standards         • H.263, H.263+, H.264           Video Features         • Native 163 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout           One HDMI and One DVI-I (Analog and Digital): Supported Formats.         • 640x480, 720x480, 720x576, 800x600, 848x480, 1024x768, 152x864, 1152x864, 1280x720, 1280x700, 1280x766, 1280x766, 1280x766, 1360x766, 1280x720, 1280 x 720@60 lps (720p60), 1280 x		Multi-way features, recording and streaming, and firewall traversal services
Default components         2x Table Microphone, remote control, cables, and power supply           Optional components         - Touch 8, Wall mount kit           Bandwidth         +H.233 and SIP up to 6 Mbps           Minimum bandwidth for resolution/frame         -720p30 from 788 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps           Video Standards         +H.263, H.263+, H.264         -           Video Inputs (Two Inputs)         One HDMI and One DVI (Analog and Diglas): Supported Formats.         -           Video Inputs (Two Inputs)         -         One HDMI and One DVI (Analog and Diglas): Supported Formats.         -           Video Output         -		Unified Communications Manager native support (requires Unified Communications Manager
2x Table Microphone, remote control, cables, and power supply           Optional components         Touch 8, Wall mount kit           Bandwidth         H.323 and SIP up to 6 Mbps           Minimum bandwidth for resolution/frame rate         -/20p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps rate           Video Standards         +1263, H.263, H.264           Video Features         Nalive 16.9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout           Video Inputs (Two inputs)         One HDMI and One DVI-I (Analog and Digital): Supported Formats.           Video Output         640v480, 720v480, 720v576, 800x600, 848v480, 1024v788, 152x864, 1152x864, 1280v720, 1280x4720, 1280x4768, 1362v364, 1024v788, 152x864, 1152x864, 1280v720, 1280x4720, 1280x4768, 1362v366, 1360v766, 1360v766, 1360v766, 1360v766, 1360v766, 1360v766, 1280v720, 4280v480, 1280v4780, 200x478, 1280v780, 200x678, 800x400, 1024v788, 152x864, 1152x864, 1280v720, 1280 x720 & 50 fps (720p50), 1360 x768 & 01ps (WXGA), 1320 x768 & 01ps (WXGA), 1280 x780 & 800 fps (WXGA), 1280 x780 &		• Codec, Precision-HD Camera - (1080p4xS2 or - 1080p12x)
Bandwidth         + H.323 and SIP up to 6 Mbps           Minimum bandwidth for resolution/frame         - 720p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps           Video Standards         + H.263, H.263+, H.264           Video Features         - Native 16:9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout           One HDMI and One DVI-I (Analog and Digtal): Supported Formats.         - 640x480, 720x480, 720x476, 800x600, 848x480, 1024x768, 152x864, 1152x864, 1280x720, 1280x1024, 1280x768, 1280x800, 1280x860, 1366x768, 1366x768, 1400x1050, 1440x90, 1680x1080, 1920x1080, EDID.           Wideo Output         Two HDMI Outputs Supported Formats.           Video Features         - 920 x 1080@60 fps (1080p60), 1920 x 1080@50 fps (1080p50), 1280 x 720@60 fps (720@50, 1280 x 720@50 fps (720@50), 1360 x 768@60 fps (WXGA), 1360 x 768@60 fps (WXGA), 1280 x 768@60 fps (WXGA), VESA Monitor Power Management, EDID. Live Video Resolutions (Encode and Decode).           Audio Standards         - 6.711, G.722, G.722, 1, 64 kbps AAC-LD           Audio Inputs         Two microphones, 4-pin mini jack, One mini jack for line-in (stereo). One audio in from camera (HDMI)           Audio Outputs         One mini jack for line out (stereo). One HDMI, (digital main audio)           Dual Stream         + 1239 (H.323) dual stream, BCPC (SIP) dual stream, Support resolutions up to 1080p (1920 x 1080)           Multi-Site Features         - Multi-Way support (requires Video Communication Server I/VCS] and MCU)           Adaptity	Default components	2x Table Microphone, remote control, cables, and power supply
Minimum bandwidth for resolution/frame         · 720p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps           Video Standards         · H 263, H.263+, H.264           Video Features         · Native 16:9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout           One HDMI and One DVI-I (Analog and Digital): Supported Formats. · 640v480, 720x480, 720x578, 800x600, 848x480, 1024x768, 152x864, 1220x720, 1280x720, 1280x768, · 1280x800, 1280x900, 1360x768, 1366x768, 1400x1050, 1400x1050, 1920x1050, 1920x720, 1280 x720, 4280x720, 1280x720, 1280x720, 1280x768, · 1280x800, 1280x900, 1360x768, 1366x768, 1400x1050, 1420ux1050, 1920ux1050, 1920ux720, 4280x720, 1280 x720, 4280x70, 1280 x720, 4280x70, 1280 x720, 4280x800, 1280 x720, 400x1050, 1920ux1050, 1920ux1050, 1920ux1050, 1920ux720, 4280 x720, 4280x800, 1280 x720, 4280x800, 1280 x720, 4280x800, 1280 x780, 4860 fps (WXGA), 1280 x780, 4860 fps (WXGA), VESA Monitor Power Management, EDID, Live Video Resolutions (Encode and Decode).           Audio Standards         • G.711, G.722, G.722.1, 64 kbps AAC-LD           Audio Inputs         Two microphones, 4-pin mini jack, One mini jack for line-in (steree), One audio in from camera (HDMI)           Audio Standards         • G.711, G.722, G.722.1, 64 kbps AAC-LD           Multi-Point Support         Two microphones, 4-pin mini jack, One mini jack for line-in (steree), One audio in from camera (HDMI)           Audio Inputs         Two microphones, 4-pin mini jack         Two microp	Optional components	Touch 8, Wall mount kit
for resolution/frame rate         • 720p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps           Video Standards         • H263, H.263+, H.264           Video Features         • Native 16.9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout           One HDMI and One DVI-I (Analog and Digital): Supported Formats.         • 640x480, 720x480, 720x576, 800x600, 484x480, 1024x768, 152x864, 1152x864, 1280x720, 1280x720, 1280x768, 1360x768, 1000, 1360x720, 480, 1024x720, 1360x768, 436, 1030x768, 400x1050, 1420x720, 480, 102, 1280x780, 480, 400, 1360x780, 480, 400, 1360x780, 480, 400, 140, 1360x780, 400, 140, 1360x780, 400, 140, 1360x780, 400, 1280x780, 400, 1280x780, 100, 1280x780, 100, 100, 100, 100, 120, 100, 100, 10	Bandwidth	• H.323 and SIP up to 6 Mbps
Video Features         • Native 16:9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout           Video Inputs (Two Inputs)         One HDMI and One DVI-I (Analog and Digital): Supported Formats.           • 640x480, 720x480, 720x480, 720x576, 800x600, 848x480, 1024x768, 152x864, 1152x864, 1280x720, 1280x1024, 1280x768, 1280x800, 1380x768, 1366x768, 1400x1050, 1440x900,1680x1050, 1920x1080, EDID.           Wideo Output         Two HDMI Outputs Supported Formats.           1920x 1080@60 fps (1080p60), 1920 x 1080@50 fps (1080p50), 1280 x 720@60 fps (720p60), 1280 x 720@50 fps (720p50), 1280 x 758@60 fps (WXGA), 1280 x 758@60	for resolution/frame	• 720p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps
Video Inputs (Two Inputs)         One HDMI and One DVI-I (Analog and Digital): Supported Formats.           • 640x480, 720x480, 720x576, 800x600, 848x480, 1024x768, 152x864, 1152x864, 1280x720, 1280x1024, 1280x768, 1280x800, 1280x800, 1280x960, 1360x768, 1366x768, 1400x1050, 1440x900, 1680x1050, 1920x1080, EDID.           • Video Output         Two HDMI Outputs Supported Formats.           • 1920 x 1080@60 fps (1080p60), 1920 x 1080@50 fps (1080p50), 1280 x 720@60 fps (720p60), 1280 x 720@50 fps (720p50), 1280 x 720@50 fp	Video Standards	• H.263, H.263+, H.264
Video Inputs (Two Inputs)         • 640x480, 720x576, 800x600, 848x480, 1024x768, 152x864, 1152x864, 1280x720, 1280x1024, 1280x768, 1280x800, 1280x960, 1360x768, 1366x768, 1400x1050, 1440x900, 1680x1050, 1920x1080, EDID.           Video Output         Two HDMI Outputs Supported Formats.           1920 x 1080@60 fps (1080p60), 1920 x 1080@60 fps (1080p50), 1280 x 720@60 fps (720p60), 400x reduction is reduction, Active ip synchronization           Audio Inputs         One mini jack for line out (stereo), One HDMI, (digital main audio)         One x for avait (stereo), One HDMI, (digital main audio)           Dual Stream         • H.239 (H.323 Multi-Site; resoluti	Video Features	Native 16:9 widescreen, Advanced screen layouts, Intelligent video management, Local auto-layout
(Two Inputs)       • 440x480, 720x480, 720x480, 720x480, 720x480, 720x480, 720x480, 720x480, 720x480, 720x480, 720x800, 1280x768, 1280x768, 1280x700, 1280x1050, 140x900, 180x1050, 1920x1080, EDID.         Wideo Output       Two HDMI Outputs Supported Formats.         1920 x 1080@60 fps (1080p60), 1920 x 1080@50 fps (1080p50), 1280 x 720@60 fps (720p60), 1280 x 720@60 fps (720p60), 1280 x 720@60 fps (WXGA), VESA Monitor Power Management, EDID, Live Video Resolutions (Encode and Decode).         Audio Standards       • G.711, G.722, G.722.1, 64 kbps AAC-LD         Audio Inputs       Two microphones, 4-pin mini jack, One mini jack for line-in (stereo), One audio in from camera (HDMI)         Audio Outputs       One mini jack for line out (stereo), One HDMI, (digital main audio)         Dual Stream       • H.239 (H.323) dual stream, BFCP (SIP) dual stream, Support resolutions up to 1080p (1920 x 1080)         • Huti-Point Support       • Adaptive SIP/H.323 Multi-Point reference Multi-Site         • Multi-way support (requires Video Communication Server [VCS] and MCU)       • Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 576p30, 4-way resolutions up to 1080p15/SXGA         • Huti-ipoint for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA       • Best Impression (automatic continuous presence layouts)         • H.264, encryption and dual stream from any site       • PD own-speeding, Dial in and dial out, Conference rates up to 6 Mbps <th>Video Inputs</th> <th>One HDMI and One DVI-I (Analog and Digital): Supported Formats.</th>	Video Inputs	One HDMI and One DVI-I (Analog and Digital): Supported Formats.
Video Output         1920 x 1080/60 fp st (1080p60), 1920 x 1080/650 fps (1080p50), 1280 x 720/650 fps (720p50), 1280 x 720/650 f		
(720p50), 1366 x 768@60 (ps (WXGA), 1360 x 768@60 (ps (WXGA), 1280 x 768@60 (ps (WXGA), VESA Monitor Power Management, EDID, Live Video Resolutions (Encode and Decode).         Audio Standards       6.G.711, G.722, G.722.1, 64 kbps AAC-LD         Audio Features       • CD-quality 20 KHz mono, Two acoustic echo cancellers, Automatic Gain Control (AGC), Automatic noise reduction, Active lip synchronization         Audio Inputs       Two microphones, 4-pin mini jack, One mini jack for line-in (stereo), One audio in from camera (HDMI)         Audio Outputs       One mini jack for line out (stereo), One HDMI, (digital main audio)         Dual Stream       • H.239 (H.323) dual stream, BFCP (SIP) dual stream, Support resolutions up to 1080p (1920 x 1080)         • Four-way embedded SIP/H.323 Multi-Point reference Multi-Site       • Multi-way support (requires Video Communication Server [VCS] and MCU)         • Ability to natively join multipoint conferences hosted on Telepresence Multipoint Switch (CTMS)       • Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 720p30, 4-way resolution up to 576p30, 5-ull individual audio and video transcoding         • Individual layouts in multisite continuous presence       • H.323/SIP/VoIP in the same conference         • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA       • H.264, encryption and dual stream from any site         • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps       • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps		Two HDMI Outputs Supported Formats.
Audio Features       • CD-quality 20 KHz mono, Two acoustic echo cancellers, Automatic Gain Control (AGC), Automatic noise reduction, Active lip synchronization         Audio Inputs       Two microphones, 4-pin mini jack, One mini jack for line-in (stereo), One audio in from camera (HDMI)         Audio Outputs       One mini jack for line out (stereo), One HDMI, (digital main audio)         Dual Stream       • H.239 (H.323) dual stream, BFCP (SIP) dual stream, Support resolutions up to 1080p (1920 x 1080)         Multi-Point Support       • Four-way embedded SIP/H.323 Multi-Point reference Multi-Site         Multi-Visite Features       • Multi-way support (requires Video Communication Server [VCS] and MCU)         • Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 720p30, 4-way resolution up to 576p30, Full individual audio and video transcoding         • Individual layouts in multisite continuous presence       • H.323/SIP/VoIP in the same conference         • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA         • H.264, encryption and dual stream from any site       • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps	Video Output	(720p50), 1366 x 768@60 fps (WXGA), 1360 x 768@60 fps(WXGA), 1280 x 768@60 fps (WXGA), VESA Monitor
Audio Features         reduction, Active lip synchronization           Audio Inputs         Two microphones, 4-pin mini jack, One mini jack for line-in (stereo), One audio in from camera (HDMI)           Audio Outputs         One mini jack for line out (stereo), One HDMI, (digital main audio)           Dual Stream         +H.239 (H.323) dual stream, BFCP (SIP) dual stream, Support resolutions up to 1080p (1920 x 1080)           Multi-Point Support         -Four-way embedded SIP/H.323 Multi-Point reference Multi-Site           Multi-vay support (requires Video Communication Server [VCS] and MCU)         - Ability to natively join multipoint conferences hosted on Telepresence Multipoint Switch (CTMS)           Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 720p30, 4-way resolution up to 576p30, Full individual audio and video transcoding           Individual layouts in multisite continuous presence         - H.323/SIP/VoIP in the same conference           Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA           Best Impression (automatic continuous presence layouts)           H.264, encryption and dual stream from any site           IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps	Audio Standards	• G.711, G.722, G.722.1, 64 kbps AAC-LD
Audio Inputs       Two microphones, 4-pin mini jack, One mini jack for line-in (stereo), One audio in from camera (HDMI)         Audio Outputs       One mini jack for line out (stereo), One HDMI, (digital main audio)         Dual Stream       • H.239 (H.323) dual stream, BFCP (SIP) dual stream, Support resolutions up to 1080p (1920 x 1080)         Multi-Point Support       • Four-way embedded SIP/H.323 Multi-Point reference Multi-Site         Multi-way support (requires Video Communication Server [VCS] and MCU)       • Ability to natively join multipoint conferences hosted on Telepresence Multipoint Switch (CTMS)         • Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 720p30, 4-way resolution up to 576p30, Full individual audio and video transcoding         • Individual layouts in multisite continuous presence       • H.323/SIP/VoIP in the same conference         • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA         • Best Impression (automatic continuous presence layouts)         • H.264, encryption and dual stream from any site         • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps	Audio Features	
Dual Stream         • H.239 (H.323) dual stream, BFCP (SIP) dual stream, Support resolutions up to 1080p (1920 x 1080)           Multi-Point Support         • Four-way embedded SIP/H.323 Multi-Point reference Multi-Site           • Multi-way support (requires Video Communication Server [VCS] and MCU)         • Ability to natively join multipoint conferences hosted on Telepresence Multipoint Switch (CTMS)           • Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 720p30, 4-way resolution up to 576p30, Full individual audio and video transcoding           • Individual layouts in multisite continuous presence         • H.323/SIP/VoIP in the same conference           • H.323/SIP/VoIP in the same conference         • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA           • Best Impression (automatic continuous presence layouts)         • H.264, encryption and dual stream from any site           • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps         • Multi-Site for Site	Audio Inputs	
Multi-Point Support <ul> <li>Four-way embedded SIP/H.323 Multi-Point reference Multi-Site</li> <li>Multi-way support (requires Video Communication Server [VCS] and MCU)</li> <li>Ability to natively join multipoint conferences hosted on Telepresence Multipoint Switch (CTMS)</li> <li>Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 720p30, 4-way resolution up to 576p30, Full individual audio and video transcoding</li> <li>Individual layouts in multisite continuous presence</li> <li>H.323/SIP/VoIP in the same conference</li> <li>Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA</li> <li>Best Impression (automatic continuous presence layouts)</li> <li>H.264, encryption and dual stream from any site</li> <li>IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps</li> </ul>	Audio Outputs	One mini jack for line out (stereo), One HDMI, (digital main audio)
Multi-Point Support         • Multi-way support (requires Video Communication Server [VCS] and MCU)           • Multi-way support (requires Video Communication Server [VCS] and MCU)           • Ability to natively join multipoint conferences hosted on Telepresence Multipoint Switch (CTMS)           • Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 720p30, 4-way resolution up to 576p30, Full individual audio and video transcoding           • Individual layouts in multisite continuous presence           • H.323/SIP/VoIP in the same conference           • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA           • Best Impression (automatic continuous presence layouts)           • H.264, encryption and dual stream from any site           • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps	Dual Stream	• H.239 (H.323) dual stream, BFCP (SIP) dual stream, Support resolutions up to 1080p (1920 x 1080)
Multi-Site Features (Embedded Multipoint)         • Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 720p30, 4-way resolution up to 576p30, Full individual audio and video transcoding           • Individual layouts in multisite continuous presence         • Individual layouts in multisite continuous presence           • H.323/SIP/VoIP in the same conference         • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA           • Best Impression (automatic continuous presence layouts)         • H.264, encryption and dual stream from any site           • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps         • Mbps		Four-way embedded SIP/H.323 Multi-Point reference Multi-Site
Multi-Site Features (Embedded Multipoint)         • Adaptive SIP/H.323 Multi-Site; resolution up to 576p30, 3-way resolution up to 720p30, 4-way resolution up to 576p30, Full individual audio and video transcoding           • Individual layouts in multisite continuous presence         • Individual layouts in multisite continuous presence           • H.323/SIP/VoIP in the same conference         • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA           • Best Impression (automatic continuous presence layouts)         • H.264, encryption and dual stream from any site           • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps         • Multiposite	Multi-Point Support	Multi-way support (requires Video Communication Server [VCS] and MCU)
Multi-Site Features (Embedded Multipoint)       576p30, Full individual audio and video transcoding         • Individual layouts in multisite continuous presence         • H.323/SIP/VoIP in the same conference         • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA         • Best Impression (automatic continuous presence layouts)         • H.264, encryption and dual stream from any site         • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps		Ability to natively join multipoint conferences hosted on Telepresence Multipoint Switch (CTMS)
Multi-Site Features (Embedded Multipoint)       • H.323/SIP/VoIP in the same conference         • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA         • Best Impression (automatic continuous presence layouts)         • H.264, encryption and dual stream from any site         • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps		
(Embedded Multipoint)       • Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA         • Best Impression (automatic continuous presence layouts)         • H.264, encryption and dual stream from any site         • IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps		Individual layouts in multisite continuous presence
Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SAGA        Best Impression (automatic continuous presence layouts)      H.264, encryption and dual stream from any site     IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps		• H.323/SIP/VoIP in the same conference
Best Impression (automatic continuous presence layouts)     H.264, encryption and dual stream from any site     IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps	•	Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15/SXGA
• IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps		Best Impression (automatic continuous presence layouts)
		H.264, encryption and dual stream from any site
Protocols • H.323, SIP, ISDN ((requires ISDN Link)		• IP Down-speeding, Dial in and dial out, Conference rates up to 6 Mbps
	Protocols	• H.323, SIP, ISDN ((requires ISDN Link)

	H.323 and SIP point-to-point
Embedded Encryption	Standards-based: H.235 v3 and Advanced Encryption Standard (AES)
	Automatic key generation and exchange
	Supported in dual stream
	DNS lookup for service configuration
	Differentiated services (Quality of Service - QoS)
	IP-adaptive bandwidth management (including flow control)
	Automatic gatekeeper discovery
IP Network Features	Dynamic play-out and lip-sync buffering
	• H.245 Dual Tone Multi-frequency (DTMF) tones in H.323
	Date and time support using Network Time Protocol (NTP)
	Packet loss-based down speeding, Uniform resource identifier (URI) dialing
	• TCP/IP, DHCP, 802.1x network authentication, 802.1Q Virtual LAN, 802.1p (QoS and class of service [QoS])
СИСМ	• Native registration with Unified Communications Manager, Basic Unified Communications Manager provisioning, Software upgrade from Unified Communications Manager, CDP and DHCP option 150 support
	Basic telephony features such as hold/resume/transfer and Corporate Directory lookup
	Single call stack support for both H323 and SIP
IPv6 Network Support	Dual-stack IPv4 and IPv6 for DHCP, SSH, HTTP, HTTPS, DNS, DiffServ
	• Support for both Static and Automatic IP configuration (stateless address auto configuration)
Security Features	Management using HTTPS and SSH, IP administration password, Menu administration password, Disable IP services, Network settings protection
Network Interface	• One LAN and Ethernet (RJ-45) 10/100/1000 Mbps
Other Interfaces	Two USB ports for future usage
	Support for the Management Suite
Current and an an an an an an a	Total management using embedded SNMP, Telnet, SSH, XML, SOAP
System management	• Remote software upload: using web server, secure copy (SCP), HTTP, HTTPS
	Remote control and on-screen menu system
	• Support for local directories (My Contacts), Corporate directory
Directory Services	Unlimited entries using server directory supporting LDAP and H.350 (requires Management Suite)
Directory Gervices	Unlimited number for corporate directory (through Management Suite)
	• Received calls with date and time, Placed calls with date and time, Missed calls with date and time
Power	• Auto-sensing power supply, 100 - 240 VAC, 50/60 Hz, Maximum 40 watts for codec and main camera

# Technical Specifications for LED Screen (to be used with VC Equipment) (Qty=01)

S. No.	Description	Quantity
	Samsung or equivalent LED TV (46")	
	Resolution 1920 x 1080	
	Wireless connectivity	
1.	Audio Out (Mini Jack)	01
	Component In (Y/Pb/Pr)	
	Composite In (AV)	
	Digital Audio Out (Optical)	
	2 HDMI ports	
	1 Ethernet port	
	<ul> <li>RF In (Terrestrial/Cable Input)</li> </ul>	
	2 USB ports	
	Dolby Digital Plus/Dolby Pulse	
	<ul> <li>Power: AC100-240V 50/60Hz</li> </ul>	
	Auto power off	
	Energy Star compliant	
	Normal Button Remote	
	User manual, Power Cable	
	<ul> <li>Table stand, wall mounting kit with installation services</li> </ul>	
	Warranty: at least one (01) year	

#### **Evaluation Criteria**

Evaluation of received bids will be carried out as per following evaluation criteria:

- 1. Technical Evaluation 60%
- 2. Financial Evaluation <u>40%</u>

100%

Detail of technical evaluation criteria is as under:

## **Technical Evaluation Criteria**

Sr. No.	Description	Marks
1.	Multi Point support (VCS and MCU) (1+3)	5
2.	Protocols (H.323, SIP, ISDN) and embedded encryption	5
3.	Bandwidth Support (H.323 and SIP up to 6 Mbps)	10
4.	CUCM Support and Native Registration	10
5.	Performance Features (as per TORs)	10
6.	Audio/Video Ports and Features (as per TORs)	10
7.	LED TV Specifications (as per TORs)	10
Total		60