INTERNATIONAL CENTER FOR CHEMICAL AND BIOLOGICAL SCIENCES
UNIVERSITY OF KARACHI
KARACHI-75270

TENDER NOTICE NO. ICCBS/VC-180314

Sealed tenders are invited from the authorized dealers, registered with Sindh Revenue Board and income tax department for supply and deployment of *Video Conferencing System with other Equipments* at the Center.

The tender documents can be collected from Purchase Office of the Center, on any working day between 9.00 a.m. to 12.30 p.m., from the date of publication of this advertisement in the *newspapers*, on payment of Rs. 300/- (non-refundable), in shape of a pay order (Demand Draft by the out of Karachi suppliers), in favor of the Director, I.C.C.B.S or downloaded from the websites www.iccs.edu, www.pprasindh.gov.pk. The last date of issuing the bid documents is *17/03/2014*. The tenders can be submitted with 2% of the bid value as earnest money in shape of a pay order in favor of the Director, I.C.C.B.S, latest by 2.30 p.m. on *18/03/2014*.

The tenders will be opened in meeting room of the Center at 3.00 p.m. on the same day in presence of the bidders or their representatives. The Procuring Agency may reject all or any bid subject to the relevant provision of SPPRules.

DIRECTOR

INTERNATIONAL CENTER FOR CHEMICAL AND BIOLOGICAL SCIENCES
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VIDEO CONFERENCING SYSTEM
WITH OTHER EQUIPMENTS *(SPECIFICATION)*

S. No.	ITEMS	SPECIFICATION / QTY.
1.	**VIDEO CONFERENCING SYSTEM**	*01 SYSTEM CONFIGURATION AS PER ANNEXURE - A*
2.	**EXTERNAL CAMERA (12X) SAME OR COMPATIBLE BRAND**	*02 Nos.*
3.	**LED (55")**	*01 No.*
	TOTAL ESTIMATED COST	*Rs. 3,000,000.00*

S. No.	Annexure - A
1	**Design Features** ● 1U, rack-mountable ● Professional-grade connectors ● Unmatched quality and flexibility ● Standards-compliant 1080p solution — compatible with standards-based video without losing features
2	**Application Features** ● Individual Transcoding embedded MultiSite ● HD collaboration with resolutions up to WUXGA at full frame rate
3	**Performance Features** ● Optimal definition up to 1080p ● H.323/SIP up to 6 Mbps point-to-point ● Connect up to 5 HD sources ● Full duplex audio with high-quality stereo sound ● Packet loss protection technology for optimal experience
4	**Unit Delivered Complete With:** ● Videoconferencing codec, wireless remote control, rack mounting ears, LAN cable, power cable
5	**Bandwidth** ● H.323/SIP up to 6 Mbps point-to-point • Up to 10 Mbps total MultiSite bandwidth
6	**Firewall Traversal** ● H.460.18, H.460.19 Firewall Traversal
7	**Video Standards** ● H.261, H.263, H.263+, H.264
8	**Video Features** ● Native 16:9 Widescreen ● Advanced Screen Layouts ● Intelligent Video Management ● Local Auto Layout
9	**Video Inputs (5 Inputs)** **2 X HDMI Inputs, Supported Formats:** ● 1920 x 1080@60, 59.94 Hz (1080p60) **2 X DVI-I Inputs, Supported Formats:** Analog (VGA): ● 1920 x 1080@60 Hz (1080p) ● 1280 x 720@60 Hz (720p) **1 X S-Video/Composite Input (BNC Connectors):**

	• PAL/NTSC
	• Extended Display Identification Data (EDID)
11	**Video Outputs (3 Outputs)**
	1 X HDMI Output, 1 X DVI-I Output, Supported Formats:
	• 1920 x 1080@60 Hz (1080p60)
	1 X S-Video/Composite Input (BNC Connectors):
	• PAL/NTSC
	• Extended Display Identification Data (EDID)
12	**Live Video Resolutions**
	(Encode/Decode)
	• 720p30
	• 720p60
	• 1080p30
	• 1080p60
13	**Audio Standards**
	• G.711, G.722, G.722.1, 64 bit kbps & 128 bit kbps MPEG4
14	**Audio Features**
	• CD-Quality 20KHz Mono and Stereo
	• Four separate acoustic echo cancellers
	• 4-port Audio mixer
	• Automatic Gain Control (AGC)
	• Automatic Noise Reduction
	• Active lip synchronization
15	**Audio Inputs (7 Inputs)**
	• 4 x microphone, 48V phantom powered, XLR connector each with separate echo cancellers and noise reduction, all microphones can be set for balanced line level
	• 2 x RCA/Phono, Line Level: Stereo PC input, configurable to 2 x RCA/Phono, Line Level: Mono auxiliary/DVD input
	• 1 x HDMI, digital: Stereo PC/DVD inputs
16	**Audio Outputs (3 Outputs)**
	• 2 x RCA/Phono, line level, stereo main audio, configurable to S/PDIF or 2 x RCA/Phono, line level, mono to recording device
	• 1 x HDMI, digital, stereo main audio
17	**Dual Stream**
	• H.239 (H.323) dual stream
	• BFCP (SIP) dual stream
	• Support for resolutions up to 1080p30/WUXGA, and independent of main stream resolution
18	**Multisite Features**
	• 4-way SIP/H.323 MultiSite.

	● Full individual audio and video transcoding
	● Individual layouts in multisite CP (takes out SelfView)
	● H.323/SIP/VoIP in the same conference
	● Support for Presentation (H.239/BFCP) from any participant at resolutions up to WXGAp30
	● Best Impression (Automatic CP Layouts)
	● H.264, Encryption, Dual Stream from any site
	● IP Downspeeding
	● Dial in/Dial out
	● Additional telephone call
	● Conference rates up to 10 Mbps
19	**Protocols**
	● H.323
	● SIP
20	**Embedded Encryption**
	● H.323/SIP point-to-point
	● Standards-based: H.235 v2 & v3 and AES
	● Automatic key generation and exchange
	● Supported in Dual Stream
21	**IP Network Features**
	● DNS lookup for service configuration
	● Differentiated Services (QoS)
	● IP adaptive bandwidth management (including flow control)
	● Auto gatekeeper discovery
	● Dynamic playout and lip-sync buffering
	● H.245 DTMF tones in H.323
	● Date and Time support via NTP
	● Packet Loss based Downspeeding
	● URI Dialing
	● TCP/IP
	● DHCP
	● 802.1x Network authentication
22	**IPv6 Network Support**
	● Single call stack support for both H323 and SIP
	● Dual-stack IPv4 and IPv6 for DHCP, SSH, HTTP, HTTPS, DNS, DiffServ
	● Support for both Static and Autoconfig (stateless address auto config)
23	**Security Features**
	● Management via HTTPS and SSH
	● IP Administration Password
	● Menu Administration Password

	● Disable IP services
	● Network Settings protection
24	**Network Interfaces**
	● 2 x LAN/Ethernet (RJ-45) 10/100/1000 Mbit
26	**Telepresence HD Camera (1080p)**
	● 1/3" CMOS
	● 12 x zoom/4 x zoom
	● +15°/-25°tilt, +/- 90°pan
	● 43.5°vertical field of view
	● 72°horizontal field of view
	● Focus distance 0.3m–infinity
	● 1920 x 1080 pixels progressive @ 60fps
	● Other formats supported (configurable through Dip-switch):
	● 1920x1080@60fps
	● 1920x1080@50fps
	● 1920x1080@30fps
	● 1920x1080@25fps
	● 1280x720@60fps
	● 1280x720@50fps
	● 1280x720@30fps
	● 1280x720@25fps
	● Automatic or manual focus/brightness/white balance
	● Far-end camera control
	● Daisy-chain support (Visca protocol camera)
	● Dual HDMI and HD-SDI output
	● Upside-down mounting with automatic flipping of picture
27	**System Management**
	● Total management via embedded SNMP, Telnet, SSH, XML, SOAP
	● Remote software upload: via web server, SCP, HTTP, HTTPS
	● 1 x RS-232 for local control and diagnostics
	● Remote control and on-screen menu system
28	**Directory Services**
	● Support for Local directories (My Contacts)
	● Corporate Directory
	● Unlimited entries using Server directory supporting
	● LDAP and H.350
	● 200 number local directory
	● Received Calls
	● Placed Calls
	● Missed Calls with Date and Time

VENDER SELECTION CRITERIA

A two envelop bidding the NIT for the supply, installation and commissioning of the video conferencing solution.

Sr No	Description
1	**Technical Expertise:**
(ii)	The company should be in Video conference business for more than 5 years.
(iii)	Technical brochure of the tender equipment should be submitted along with the bid.
2	**Back-up Equipment for Services:**
(i)	The Bidder should have minimum 03 offices in Pakistan and should have country office in Pakistan
(ii)	The Bidder should have backup equipment to provide sufficient services
(iii)	The Bidder should provide backup equipment list along with serial numbers verifiable by parent company or onsite visit by IT team of ICCBS.
3	**Onsite Demo:**
(i)	The Bidder should arrange an onsite demonstration at their cost with comparable quoted equipment
4	**Vendor / Supplier Responsibility:**
(i)	Installation & Configuration will be complete responsibility of Vendor / Supplier

SUMMARY SHEET
TENDER NOTICE NO. ICCBS/VC-180314

The tender will liable to be rejected if this form will not accompany the tender bid / quote

SERIAL No.	BID VALUE	FOREIGN CURRENCY	CONVERSION RATE	PRICE IN PKR

TOTAL BID VALUE IN PKR	
Earnest Money @ 2% in PKR	
Pay order / Bank Draft No. :	**Date :**
Signature :	**Seal :**