VIDEO CONFERENCE SERVICE POLICY

National Video Conferencing Network

Version 2.0 Released January 01, 2014

HIGHER EDUCATION COMMISSION, PAKISTAN

1 GENERAL

The Higher Education Commission has been set up by the Government of Pakistan to facilitate the development of indigenous universities to be world-class centers of education, research and development. Through facilitating this process, the HEC intends to play its part in the spearheading the building of a knowledge-based economy in Pakistan.

The Higher Education sector in Pakistan has undergone major changes in response to a rapidly – changing social, economic and political environment, and in particular, changing patterns of the deployed services and their outcome. Just as technology has transformed the way user learn, it also has the power to improve the way that institutions manage their process. The Higher Education Commission aims to give Pakistan a bright future through young, qualified and an energetic generation.

2 BACKGROUND

Interactive communication network are one of the basic ingredients and integral parts of overall building block of electronic academics (e-Academia) environment. Higher Education Commission to capitalize on the investments and efforts made to date in setting up campus-wide ICT Infrastructure and institutions and to strengthen internal as well as external communication/ network successfully initiated and rolled out a project of setting up video conference facility at each public sector higher education institution which is further led to the National Interactive Distant Learning Program (NIDLP) followed by Virtual Education Project, Pakistan.

Video Conferencing is a powerful multi-media tool that improves communication and increases an organization's productivity. It is a cost-effective way to capture these benefits without being required to travel and attend. The project aimed at bringing universities in Pakistan closer and to interact and collaborate through IP based Video Conferencing System, so that students of such universities, who are not in a position to benefit from high profiled teachers/ resources, may have the opportunity to learn from them, share their ideas and views to enhance their capabilities.

3 DEFINITIONS

Video Conference (VC) is an advanced mode of communication which includes voice, video and data communication simultaneously and interactively.

Video Conferencing System (VCS) is a device which captures voice, video and data from source end, perform the compression, and then transmit over a communication network (e.g. IP, ISDN, etc.); whereas on the recipient end a compatible device receives the stream, perform the decompression, and delivers voice, video and data in real-time.

Mutli-point Conferencing Unit (MCU) is an equipment which enables more than two sites to have interactive video conference simultaneously; and also multiple such conferences in logically

segregated virtual rooms.

Streaming refers to voice, video and data transmission in real-time to those who do not possess VCS to have interactive session but wish to listen/ see the ongoing session live using web browser.

National Video Conferencing Network (NVCN) is an umbrella arrangement and facilitation to all public sector higher education institutions of Pakistan through provisioning of state-of-the-art purpose-built video conference facility.

National Interactive Distance Learning Program (NIDLP) is an initiative of the Higher Education Commission through which distance learning opportunities are created with the support of various national (e.g. VEPP of LEJ, University of Karachi) and international partners (e.g. GDLN of the World Bank).

Virtual Education Project, Pakistan (VEPP) is a concept built on the premise that a global network of scholars could contribute through video conferencing technology to the content delivered in classrooms across the country.

Global Distance Learning Network (GDLN) is a World Bank initiative, facilitates the cooperation between its Affiliates in offering their facilities, services and interactive distance learning techniques to the development community to organize and implement knowledge sharing, training, consultation and dialogue events.

4   PURPOSE OF DOCUMENT

The purpose of this document is to brief about the interactive and collaboration facilities available at the higher education institutions across Pakistan. Though the facility primarily established as to support education and research amongst the higher education institutions or even beyond, however same may be utilized to facilitate other organizations within the provision of this policy.

5   VIDEO CONFERENCING FACILITIES

The video conference unit at universities has the capability of connecting other sites as well with limited capacity, HEC has therefore installed high capacity MCUs which can facilitate Forty (40) sites simultaneously and, in cascaded mode, can connect Eighty (80) sites in a single session. These MCUs are installed at the National Datacenter and Regional Datacenter(s) to serve regional requirements for video conferencing and also provides redundancy to each other. In addition, the MCU provides personalized video conferencing services (i.e. ConferenceMe) as well to selected users on their desktop.

Moreover, a Streaming and Content Server is also deployed at the National Datacenter in Islamabad for the purpose of recording video sessions and streaming simultaneously. The server also enables maintaining these video sessions as archived multimedia contents for later use. The streaming service is available in public domain at http://streaming.hec.gov.pk to access live or

recorded video session(s). Further, the coordination and technical arrangements with the higher education institutions for the video sessions is supplemented by Management Suite which maintains the technical parameters of video conferencing units at the higher education institutions' end as well as MCU and Streaming and Content Server.

The HEC video conferencing network spans across the country while having presence in Thirty (30) cities covering all the four (04) provinces, AJK, Gilgit-Baltistan and the Federal Capital territory of Pakistan. The network thus facilitates Seventy nine (79) public sector higher education institutions connected through an underlying high speed communication network of PERN.

Table – I: HEC Video Conferencing footprints across Pakistan

Regions with footprints covering # of cities across Pakistan	Specialized Discipline of Universities/ Institutes						
	Agriculture & Veterinary [6]	Engineering & Technology [17]	Business Admn & Mngt [4]	Medical [6]	Arts & Humanities [1]	General [35]	HEC Sites [7]
AJK [2]	-	1	-	-	-	1	-
Baluchistan [3]	1	2	-	-	-	2	1
Gilgit-Baltistan [1]	-	-	-	-	-	1	-
Federal Capital [1]	-	4	1	-	-	8	3
Khyber Pakhtunkhwa [7]	1	3	1	-	-	8	1
Punjab [9]	3	3	-	2	1	12	1
Sindh [7]	1	4	2	4	-	3	1

6 OFFERED VIDEO CONFERENCING (VC) SERVICES

The HEC's Video Conferencing Network with footprints across the country offers numerous advanced services and features. The services are provided through a dedicated high speed academic and research network, that is PERN (Pakistan Education Research Network). The underlying network provides 24/7 availability, dual diversely routed internet/ intranet connections, high reliability and security.

The Video Conferencing Network currently provides the following services.

6.1 Purpose built e-Classroom Environment

Full-fledged purpose built video conferencing class room facility is available in each public sector University/DAI in the country. However, at the HEC Head Office in Islamabad and Regional Offices located in Peshawar, Lahore, Quetta and Karachi the same facility is available in meeting room environment.

6.2 Point-to-Point Video Conference

This service offering is for one-to-one video interaction between two (02) video conferencing sites on the PERN network or on some other network allowing VoIP traffic or a foreign site outside the country.

6.3 Multipoint Video Conference

This service involves more than two sites connected in a single conference. All VC sites in a multipoint service will be connected through HEC network to the Multipoint Control Unit (MCU) for bridging purpose. However, foreign sites either from within the country or outside country will also be connected to MCU for the service provisioning.

6.4 Bridging Services

Bridging Services are available for the organizations/ users who only require connecting their own private video conferencing sites through HEC MCU and do not require any of the sites under HEC Video Conferencing Network.

6.5 Recording Services

The centralized service for event Recording is available on demand and prior intimation for all users on charge basis as applicable. The recorded events are normally placed on Content Server with appropriate access privileges as defined by the Organizer. A DVD version of the event recording can also be provided on request.

6.6 Streaming Services

The recorded events are also offered broadcasting and streaming features on request of Organizer in advance. The centralized archived library is managed and maintained in a standardized format for easy searching and playing back facility for the users.

6.7 Recorded Events Editing

The editing services for an edited version of recorded event(s) are also available on request and on charge basis as applicable and the final edited version is made available to the Organizer. The same is maintained on the Content Server for streaming on demand, if allowed. The editing may include the following services;

a) Removing any irrelevant/ unwanted recording from the recorded media
b) Converting the recording format into light weight format while preserving the best possible quality of both audio & video recording.
c) Remove any material from the recording which is not conforming to the standards both technical and ethical/moral etc.

6.8   **Recorded Content Access**

The Content Management Server allows formulating the users, groups, categories and policies and so allowing setting up access privilege as appropriate as defined by the Organizer. This also ensures the contents' fast and easy search, access, play back, while guaranteeing the required system doctrine for the security and auditing.

6.9   **Consultancy Services**

The HEC also offers consultancy services through its video conferencing team to the organizations interested and intending to;

a) Establish a private video conferencing facility at their premises
b) Provide training to the staff involved with video conferencing facility
c) Join the Video Conferencing Network of HEC for participations in academic events

7   VIDEO CONFERENCING SERVICE CHARGES

The charges as defined against the utilization of video conference facility are not for commercialization of this facility, instead they are meant for the necessary operation, maintenance of the video conference site, SLA of the equipment, and remuneration to the technical human resources and staff involved beyond their normal duties.

7.1   Service Plan(s) shall be governed by HEC through Service Charges for availing video conference facilities with the approval of Principal Accounting Officer.

7.2   Service Charges may be reviewed for any possible revision in rates and/ or offered services every six (06) months or as deem necessary time to time, however, same shall be subject to approval of Principal Accounting Officer.

7.3   Service Charges once approved shall be notified and/ or posted on PERN website explicitly mentioning its date of effectiveness and any specific terms, if applicable.

7.4   Service Charges shall be in accordance with prevailing Service Plan(s) applicable at the time of applying for use.

7.5   A Purchase Order of the video conference service or full payment in advance shall be required prior to availing video conference facility.

7.6   Charges relating to refreshment (if any) or any other facilitation costing extra to HEC shall be charged separately

7.7   Any outstanding amount against any Organization may cause restriction to use the facility till the clearance of previous dues in full.

8 ELIGIBILITY CRITERIA FOR PERMISSIBLE DISCOUNT(S)

Service Plan	Situations	Offer	Detail
1	Events organized only for higher education sector, however no participants from organizing agency.	100% Discount (No Charges)	Purely HEC or collaborative partner organized events.
2	Events organized by an organization for its target audience however participation from HEIs is allowed in general. OR Events organized by any public sector organization for its own purpose, i.e. a close/ private event.	Up to 50% Discount	An organization organizes an event for its own purpose but do not restrict participation from HEC or HEIs while giving full rights to telecast and record the session(s), OR Any public sector Organization wishing to conduct video conferencing session
3	Events organized by an organization for public sector organization(s) of Pakistan as closed environment.	Up to 25% Discount	Only for HEC Partner Organization for their close meetings.
4	Events organized by organization for its own purpose or perspective only, i.e. a close/ private event.	No Discount	Facility as a Service model. Participation from HEC or HEIs or any third party is not permissible.

9 REVISION IN POLICY

This policy shall be regularly reviewed for possible revision, if deem necessary, in any eventuality. Amended texts shall be approved by the HEC and shall be made publically available.

Service Charges for availing Video Conferencing facility and services

Table I: Organizations requesting video conferencing services from within Pakistan

Sites		Foreign						
		0	1	2	3	4	5	6
Local	1		Rs. 10,000	Rs. 11,500	Rs. 13,000	Rs. 15,000	Rs. 17,000	Rs. 19,000
	2	Rs. 16,000	Rs. 17,500	Rs. 19,000	Rs. 20,500	Rs. 22,500	Rs. 24,500	Rs. 26,500
	3	Rs. 24,000	Rs. 25,500	Rs. 27,000	Rs. 28,500	Rs. 30,500	Rs. 32,500	Rs. 34,500
	4	Rs. 32,000	Rs. 33,500	Rs. 35,000	Rs. 36,500	Rs. 38,500	Rs. 40,500	Rs. 42,500
	5	Rs. 40,000	Rs. 41,500	Rs. 43,000	Rs. 44,500	Rs. 46,500	Rs. 48,500	Rs. 50,500
	6	Rs. 48,000	Rs. 49,500	Rs. 51,000	Rs. 52,500	Rs. 54,500	Rs. 56,500	Rs. 58,500

Table II: International Organizations requesting video conferencing services from within Pakistan or from abroad

Sites		Foreign						
		0	1	2	3	4	5	6
Local	1		$ 210	$ 230	$ 260	$ 300	$ 350	$ 410
	2	$ 250	$ 260	$ 280	$ 310	$ 350	$ 400	$ 460
	3	$ 330	$ 340	$ 360	$ 390	$ 430	$ 480	$ 540
	4	$ 410	$ 420	$ 440	$ 470	$ 510	$ 560	$ 620
	5	$ 490	$ 500	$ 520	$ 550	$ 590	$ 640	$ 700
	6	$ 570	$ 580	$ 600	$ 630	$ 670	$ 720	$ 780

Note: Any additional site charges shall be calculated by extrapolating the sequence maintained in above tables.