## Project Appraisal Document (PAD)

**Title:** Installation of Home-Theater & Video Conferencing System in the Newly Constructed Auditorium at Bahria University, Islamabad Campus.

The objective of the AV and HT systems installation & interior development activity is to make available state-of-the –art facilities for Bahria University members for inter-university communication at global level and recreational purposes at local level for the university academia, staff and students.

Bahria University Islamabad Campus intends to install a state-of-the-art Home theater (HT) system to give a cinematic functionality to the venue and to provide the subject facility of video conferencing and entertainment for its members. The size of the auditorium is 150'x80'. The structure includes the audio-visual (AV) system, sitting arrangement through reclining chairs and the noise-cancelling wall paneling as interior development activities. The University also intends to have a video conferencing system for two-way communication with world's leading universities. All the sub-activities will be executed in a single contract, with multiple work packages.

The project will be funded by Government funds under the Federal PPRA Rules 2004.

The tasks include Interior Development Works for the reclining chairs, Interior Development Works for noise-canceling wall paneling, Electrical works for the new HT system wiring, Electrical works for the new VC system wiring, Installation of Home Theater (HT) Equipment, Installation of Video Conferencing (VC) Equipment, Civil works for installation fixtures, Electrical works for Uninterrupted power supply, Plumbing works/waste water flushing, Maintenance /repair of the facility, Patio Tiling and Vehicle Parking. The Work Requirements for the this contract include the contractual service which must be accomplished through single point of contact through contractor's project manager who will liaise with the University's Project Director for precise measurements, tolerances, materials, quality control requirements, and other Government requirements that control the processes of the Contractor.

The Contractor shall install the hardware and software for both the systems for testing in the Auditorium to determine digital capability of the systems with the ability to record at least five streams of input simultaneously. The upgrade shall include a digital face camera that video records a participant's face, feed from an overhead camera, an audio input component, The Contractor's system shall have the ability to record voice notes over the combined recording after the fact, and include some sort of logging recording along with these other five streams of data.

- The software described above shall allow real-time flagging of digital data feed so that later coding can be done where the feed was flagged. This later coding will entail detailed behavior coding.
- 50" LED high definition TV for VC with all cables included capable of picture-in-picture display of screen and participant.
- Streamline the wiring feed between the control room and the center stage to eliminate wire cluttering.
- Ensure all hardware and software communicates across systems and software.

The HT System will be installed as per technical specifications given in the Technical Specification Section of the Standard Bidding Documents (SBDs).

Hardware and software shall be delivered free of defects and viruses and shall be installed and demonstrated to work is accordance with the above requirements prior to acceptance. Program Manager and Project Director will notify vendor in writing of acceptance.

NOTE: In this section, remote computer access refers to any number of services where the vendor is able to view the screen of the lab computers remotely and walk the user through the trouble-shooting process while looking at the same screen.

The maintenance contract is for the period of one fiscal year with one (1) option year to renew at the end of the initial year. The contractor shall give an estimate for one year of maintenance service only.

The Contractor shall also Provide two site visits during the period of performance to 1) ensure that all of the hardware and software in the Auditorium is functioning correctly, efficiently and in accordance with the specifications and standards provided in each component's manual and according to industry standards and, 2) solve equipment or software problems as reported in writing by the program manager. He shall maintain functional control of the two installed systems from the control room during testing sessions as well as bi-directional audio video communication between the control room and the connected station (s). He shall maintain functional transmission of participant video and audio feed along with screen shot feed in real time to the observation screen. He shall respond to requests for maintenance within 24 hours of request. He shall provide trouble-shooting/remote assistance on an unlimited basis during period of performance. The hardware required to achieve this remote control from the control room shall include updated and streamlined hardware.

The University expects to accomplish under the contract the completion of the tasks at the same time within the budgetary allocation for new systems installation and interior development, both within four months under the Lump sum Fixed price contract.

Place of performance will be the North-East side of the University on Plot coordinates latitude 37'-09 and 14'-38 Longitude. The said coordinates will be indicated by the PD on the Coordinates map and will be given to the Contractor after contract award.

A combination of hardware and software/firmware that performs a dedicated function serving a Government requirement, including, but not limited to electronics equipment, networks, shelters, ground support equipment, and support structures. These also include all University-furnished property, as mentioned in the lists at the time of contract award.

Certain University office or laboratory space may be made available for performance of specific Tasks. Contractor may be required to establish operations and support facilities and warehouses within a University-provided facility that comply with Product or process certification and accreditation requirements

The unique security requirements associated with contract performance:

- Special pass for identification requirements will be issued by the University management. Project Director will sign the said passes.
- All contractor personnel will require special security clearance as the contract performance site belongs to an Defence establishment;
- Special escort requirements arranged by the PD will be required for the Contractor's specialized technical staff to University's server rooms, IT installations and electricity facilities. Including generator room.

The signaling and ICT gadgets are required to be inspected by the University's Security staff before giving a green flag to the same for their entry into the premises. Such equipment whose frequency may interfere with the frequency of the signaling equipment of the Defence establishments, will be treated as Special materials and their transport, entry and handling will be treated differently as per the SOPs issued by the PD in this regard. The Contractor may describe requirements for any other special materials that are to be encountered in the performance of the service(s).

The Contractor must deliver its technical input on the schematic drawings of the new structure for civil, plumbing and electrical works 7 days after the contract award.

The Contractor must deliver the work schedule in Primavera Project Planner not more than 7 days after the submission of its technical input.

The deliverables shall include complete, functional system including hardware and software as described above. The whole system should function to support the daily workflow of the functions, maintenance both remotely and on-site twice per fiscal year, provision by contractor before installation, of upgrade, detailed diagrams and descriptions of the work that will be done as well as contact information for the person to be contacted for trouble-shooting for each component of the system. After installation, he needs to provide detailed specs, diagrams, and manuals to document the new equipment setup and functionality. Contractor shall give 2-3 hours training on the new equipment and at least 4 hours training on the new integrated software system for up to 8 University employees. He shall visit two site visits during contract performance.

In order to maintain the hassle-free traffic of vehicles and undisturbed flow of student entry into the university premises, the Contractor's personnel will be allowed to travel to the back gate of the University through the passage which is otherwise exclusively reserved for the defence personnel for reaching the Bahria and Air Force establishments. The Contractor may require to tell any other travel requirements that are to be encountered in the performance of the service(s).

The Contractor may describe requirements for any other unique materials that are to be encountered in the performance of the service(s) or considerations.

The period of performance is not more than four months from the date of award of contract.