

Annexure 1: Scope of Work for the Smart Classroom Solution

1. University's Objectives

The purpose of the University acquiring the Services:

- Is to seek a Smart Classroom service provider who can provide pricing, software licences, training, implementation/rollout and a robust solution/system.
- To satisfy the following objectives:
 - Improve the learning environment by extending the academic pedagogy to a wider audience – meaning moving from a traditional physical lecture-to-students classroom to a lecture-to-remote based location via live video streaming.
 - To empower the university with a technology driven learning environment for modern learning practices which will benefit both lecturer and student.
 - To provide an opportunity for the lecturer to teach students in multiple locations while operating/conducting lectures from a single location (i.e. the University classroom) – a one-to-many scenario.
 - Reinforcing and supporting the teaching, learning and evaluation process with the use of technology
 - Enhanced interactions between lecturer and students in the classroom.
- The solution/system will be supplied and the services delivered substantially in accordance with the timelines set out in this scope of work.

2. Overview of the Services (Product Description)

The scope and elements of the Project to include this type of classrooms with following details:

Type 1:

Is 146m² in size (60 seater), flat floor classroom. The technology base is very low that features a simple ceiling mounted projector and a VGA and HDMI connector for laptops.

The venue consists of the following technology items:

- 2x Grandview screens
- Switcher for on/off
- Panasonic projector LB-360

Type 2:

Is 228 m² in size (300 seater), auditorium.

The venue consists of the following technology items:

AV Room

- AV 2 Crestron processor –Runs SIMPL Windows from Crestron(The programming that controls all hardware's gets loaded in here)
- Sound web (London) BLU100-Controls all kinds of audio(i.e Microphones, laptop sound and pc sound)
- 2xCrown amplifiers

Inside the auditorium

- DHD 800 Christie Projector
- Wolf Vision Document Camera
- Podium Desktop PC
- Extron DVS 510 Video Scaling (DVI,VGA inputs and DVI,VGA outputs)
- Extron SW4 DVI PLUS SERIES –Video switcher
- Kramer CAT 5 DVI transmitter and receiver
- Lapel microphone and podium microphone.
- 4 JBL Speakers
- Crestron control panel(button on the podium)
- Light control system



3. High level Smart Classroom Solution Requirements:

- Lecturer's ability to capture and record learning and teaching interactions from / using a variety of input devices, i.e.:
 - Mobile devices (Smartphones, Tablets, iPads, Laptops)
 - Desktop PCs
 - Audio inputs
 - Multiple cameras
 - Interactive smart boards with touch screen capabilities
 - Document cameras
- Where appropriate, students will have the ability to participate in the learning and teaching interactions using various, methods i.e. chat facility, raising of hand feature, etc.
- Students have the ability to access/download and playback lectures and lecture materials in different formats after the lecture
- Interactive smart control panels
- Lecturer's ability retrieve the recordings for editing and storage
- A reliable Wi-Fi connection for all students in the classroom
- Multimedia lecterns/desks
- In a flat surface classroom:
 - Movable furniture and ability to reconfigure the space as and when required
 - Multiple interactive smart boards (allow touch screen capability)
- Lecturer should have the ability to use and access different media, teaching materials, etc. from various sources – LMS, Internet, Devices ... i.e. lecturer might want to go into other software applications (stats apps, development environments, online textbooks or other learning materials) show simulations, play videos, etc.
 - These should also all be "captured"/recorded

4. Support, Maintenance and Associated Service Responsibilities

4.1 Internal (Wits) Smart Classroom Software Support Team

- The teams' application management and maintenance activities will be consistent with the application management function.
- AST (service desk) will function as the service desk for the application within their scope of responsibility.
- AST (service desk) will act as the single point of contact for the work events associated with the application.
- AST (technical team) will be responsible for managing application enhancements and maintenance requests through their entire lifecycle.
- AST (technical team) has to ensure that the application is available to the users during the required hours of operation.

4.2 External Smart Classroom Software Support Team

- The service provider should be able to offer support in the following areas:
- Service functionality – should the AST (technical team) not be able to resolve the issue(s) internally, support should be given
- Service availability and reliability – any technical and complex issues that might arise whereby the internal ATS cannot restore the availability of the application within the defined OLA's, the SLA's pertaining to this should be triggered

4.3 Smart Classroom Technology Support - Warranty:

- Extended warranty, how long parts are available
- Local support availability
- How many support staff is available
- How will support for out-of-warranty be provided
- Response time about classroom downtime of equipment. ie 1st level, and 2nd levels support.
- Provide a minimum acceptable warranty of 12 months

5. Service Levels

A Service Level Agreement will be signed between the preferred supplier and outlining all the deliverables agreed to between the parties in line with SLA NEC 3 or 4.

6. Services Specifications and Bill of Materials Scope

- Refer to Annexure 2 for Bill of material

7. Standards

The successful services provider will be required to meet the minimum list standards for compliance, that is:

- ISO 9001
- COBIT
- ICASA
- ISACA
- ITIL

8. Training

The Supplier will provide the following training (training needs will be better defined at the start of the Project):

- End-user training on Smart classroom technology
- Train-the-trainer on the use Smart classroom technology for AV, Service desk, ICT.
- Electronic HOW-TO guide for users
- Administrative and technical training for the back-end support (for the internal application support team.)

9. Service Provider Responsibilities

The Service Provider will:

- a. Designate its Project Manager for this Agreement (Service Provider Representative). The Service Provider may from time to time and on written notice designate other persons to act as its Representative. This Representative will liaise with the University as often as required for the efficient implementation of the Project and is authorised to transmit instructions from the Service Provider to the University. To also receive information from the University, submit to the University reports as appropriate, which may include partial reports released from time to time at dates as may be designated in the Scope of Work,
- b. Assign a personnel complement sufficient both in numbers and skills to ensure due and proper performance of its obligations under this Agreement,
- c. Perform the Services with due care and skill and in accordance with the degree of skill, care and diligence normally exercised by recognised professional persons or firms who supply Services of a similar nature,
- d. If and whenever the University gives it written notice of any deficiencies in performing its obligations hereunder, acknowledge such notice in writing within 5 days,
- e. Provide continued training and development for all of its personnel in those skill areas relevant to the performance by the Service Provider of its obligations under this Agreement,
- f. Ensure that the Services will be fit for the purposes for which these types of Services are commonly required and for any other purposes described in this Agreement,
- g. Ensure that it and its personnel comply with all applicable laws and the University rules, regulations and policies, procedures and standing orders, as may be amended from time to time. Without limiting the generality of this, the Service Provider must comply with applicable legislation relating to the rendering of the Services,
- h. Be solely responsible for, and carry all risk associated with this project, and
- i. Keep statistics, minutes and other records required by legislation on file and available for inspection by the University.
- j. Comply with ISO 9001
- k. Provide a letter from the OEM
- l. Provide evidence of proven track record and experience
- m. Provide certification for the tool needed, such as supporting software

- n. Provide skills transfer

10. University Responsibilities

The University will:

1. Designate its Manager and its Project Manager (University Representative) for this Agreement. The University may from time to time and on written notice designate another person to act as its Representative. This Representative will liaise with the Service Provider as often as required for the efficient implementation of the Project and is authorised to transmit instructions from the University to the Service Provider, and to receive information from the Service Provider,
2. Either directly, or through the University Representative, instruct the Service Provider regarding the University's requirements in connection with the Project. The University Representative is authorised to define and interpret the University's requirements regarding the Services and convey decisions pursuant to the Project to the Service Provider and to receive information from the Service Provider on behalf of the University,
3. Provide the Service Provider with such access as may be necessary to perform the Services required of the Service Provider for the purposes of the Project,
4. Make available all information as may be necessary to enable the Service Provider to fulfil its obligations under this Agreement,
5. Give written notice to the Service Provider if and whenever it becomes aware of any deficiencies in the Services provided hereunder.
6. Pay the Service Provider as provided for in this Agreement

11. Project Plan & Timelines

The Project Plan with time-lines for the rollout of the project will be done in consultation with the successful service provider.

The above-prescribed solution must be delivered by November 2018.

12. Deliverables and Delivery Schedule

The Deliverables and associated delivery dates under this Agreement to be agreed upon with the successful service provider.

13. Acceptance Criteria

The Supplier's services under this Agreement will be considered accepted by the University when:

- The solution provided is fit for purpose.
- Requirements have been met and satisfies the need/requirements provided.

14. Risks, Assumptions, Dependencies & Exclusions (RADE)

Risks are uncertain events that may affect the Project objectives should they occur. The Service Provider will effectively manage the risks listed in the Risk Register contained in **Appendix A**.

A comprehensive risk analysis will be performed at the start of the Smart Classroom Project and risk management will be performed throughout the project life cycle.

15. Charges and Payment

Once the implementation plan has been agreed upon with the successful service provider, the payment milestones will be incorporated in the plan.

16. Change Management

The changes made in the project should be noted in the change control log and approved through the change control advisory board. Impact analysis should be conducted thoroughly to depict the change implications in relation to time and charges, if any.

17. Methods and procedures

The Service Provider shall access the University's precincts and perform work associated with the contract in accordance with the University's specification for Access to and performing works and services on the University's Precincts