



UNIVERSITY OF KERALA

THIRUVANANTHAPURAM

November 2020

Invitation for Expression of Interest (Eoi) from eligible Agencies / Total Solution Providers for Implementation and maintenance of Theatre Class rooms in various Teaching Departments of the University of Kerala

<i>Mode of Submission</i>	<i>:- Hard Copy By Registered Post/Speed Post</i>
<i>Last date and time of submission of Eoi</i>	<i>:- 25-11-2020, 3.00 pm</i>
<i>Address of recipient</i>	<i>:- The Registrar, University of Kerala, Thiruvananthapuram, Kerala-695034</i>
<i>Date of technical discussion session</i>	<i>: - 27.11.2020, 11.00 am</i>
<i>Last Date for the submission of technical and financial bid</i>	<i>:- 15.12.2020 3:00 p.m.</i>

1. About University of Kerala

University of Kerala is the Mother University from which all the other Universities in Kerala have evolved. Our University has produced many eminent personalities who have been successful both in India and abroad and have brought the laurels to the country. University of Kerala got Maiden Chancellor's Award for 'the Best University' in the State. Kerala University is ranked 23rd by National Institute Ranking Framework (NIRF) and is at the top most in Kerala State.

University has decided to establish theatre classroom to enhance the teaching learning infrastructure in the University departments. An interactive theatre classroom with well-equipped facilities is a necessity for providing sophisticated education to compete with the dynamic demands of modern world.

2. Objectives of the Project

- a) To provide flawless education system through student-centric technology, in an interactive platform.
- b) To accelerate the pace in delivering full-fledged education in all aspects with the aid of modern technology

3. Objective of the EoI

The objective of the EoI is to select suitable agencies (for handling the end-to-end activities encompassing but not limited to, the implementation, integration with existing systems, setup of all hardware components and interfaces)

4. Scope of work

Scope of work includes design, execution and maintenance of 40 theatre class rooms in the existing rooms of various teaching departments of the University. Aesthetically designed theatre like class rooms with facilities to give classes digitally and store this on a central server. These classes have to be streamed over internet facility to incorporate the students/ faculties from far end. Overall civil, electrical, networking, and digital solution has to be provided by the bidder to the above extent. Various activities included in the scope of work are listed below. List of Departments with class rooms sizes are appended in Annexure 1.

A. CIVIL WORK

1. Minor civil modification works in the proposed class rooms
2. Painting of walls on a putty finish
3. Structural Repairing/plastering repair
4. Flooring:-Stepped flooring using wooden platforms with approved hard wood to provide theatre effect and finished with fixed synthetic nylon wool carpet and lecture platform for small and medium size room and vitrified tile flooring for large rooms.
5. Wall Finishing:- Emulsion paint over wall putty and acoustic fabric paneling cut outs as per requirement for small and medium rooms. Wall paneling and acoustic paneling to large rooms
6. False ceiling:- with perforated GRG perforated ceiling board in GI pressed channels and perimeter channels
7. Furniture:- Seasoned hard wood melamine finished tables and benches of curved shape, fixed type each unit having seating capacity 3nos, and with comfortable back rest according to room size for small and medium size rooms and theatre chairs for large rooms
8. Wooden shelf for storage of size 1.00mx 1.20 m with inside racks, shutters and locking arrangements
9. Window curtains with venetian roller blinds
10. Wooden Lecture platform of suitable size

B. ELECTRICAL WORK

1. Concealing of the existing conduits is required for getting better aesthetical appearance
2. Modification and standardization of panel boards in place of old and dilapidated panel boards wherever necessary
3. Enhance the capacity of the transformers and LT panels in the substation considering the additional load requirements.
4. Providing new energy efficient lights including wiring of light points in the theatre room
5. Providing plug points and related wiring for connecting all electrical installations
6. Providing Air conditioning wiring wherever necessary
7. Providing new light distribution boards and power distribution boards according to new requirement
8. Net working arrangements in the theatre class rooms

C. Facilities of Theatre Classroom

The following facilities are required in the proposed theatre classroom

1. There should be one PTZ Camera with auto tracking system for recording the lecture and another wide angle video camera focusing the audience in the class room
2. There should be an interactive digital podium with Desktop Processor, Boundary layer Microphone, writing pen and other facilities
3. There should be proper and dedicated microphones for the audience
4. There should be separate microphone for the teacher that will not interrupt the teacher's movement (Lapel mic\headband microphone)
5. Audio Speaker system appropriate for the classroom, depending upon the dimensions and nature of the class room
6. Ultra Short Throw Projector and display board
7. Audio - video processor that supports the following requirements
 - a. The display will be from interactive podium/camera (teacher or audience)/live participant from remote location/all
 - b. The output of the system should be in a single entity where the person who speaks (it can be either teacher or student or live participant) will come in the picture along with the presentation, if any.
 - c. Advanced audio processing, unwanted background noise such as paper rustling or keyboard rattle or conference call echo should be removed from the audio.
 - d. The so selected video and audio should be treated as one entity, called video out
 - e. Provision to save the video out in the local/remote data store
 - f. Provision to make the video out as live in software based video calls such as Google meet, Zoom, Jitsi, etc.
 - g. Provision to interact with the remote participant
 - h. Provision for to and fro connectivity - Bluetooth, wireless, USB, HDMI, etc
8. Remote controlled/single point controlling system for the entire system
9. Additional two year annual maintenance contract, over the five year guarantee period for all the equipment and their desired services
10. UPS for a minimum of 1 hour backup
11. The system shall be compatible for video conferences hosted in hardware based systems like Polycom, etc.

Networking requirement

	Item	Qty	Unit
1	Supply and installing of 3x3 Box, faceplate, I/O and its termination	120	no
2	Supply and installation of CAT6 UTP cable through PVC pipe of appropriate size and termination using RJ 45 including supply of pipe and RJ 45 connectors	7500	M
3	Supply, installation and configuring of 24 port L2 Managed switch, with 4 nos 1Gbps SFP port, lifetime warranty, HP/NETGEAR/CISCO	22	no
4	Supply, installation and configuring of 48 port L2 Managed switch with 4 nos 1Gbps SFP port, lifetime warranty, HP/NETGEAR/CISCO	1	no
5	Supply and fixing of Rack 9U, including necessary patch panel and cable manager, and patch cords	13	no
6	Supply and laying of 1Gbps OFC through HDPE pipe (including supply of HDPE pipe) and splicing of OFC	150	m
7	Supply and fixing of fully loaded 12 port LIU	2	no
8	Supply and installation of 1G SFP module, and required optical patch cord	2	no
9	Additional item if any for completing the project	1	LS

5. Eligibility Criteria

(1) General

- a. The agency should be registered in India at least for the last 5 years
- b. Agency should have valid PAN Number
- c. The agency should also have GST Registration.
- d. The bidder or their associates shall not be blacklisted in India or abroad by any government department/agency in last 7 years. The bidder should furnish a self-certified undertaking to the effect.

- e. There will not be any litigation against the firm or their associates for default in execution of work, misbehavior, mishandling of assets or on other matters related with the execution of works.

Technical

- a. The firm should have minimum five years experience in executing works of similar nature in all the four components of work such as civil, electrical, hardware and internet service. The bidder have executed works of similar nature within the last three years; minimum one work for a value not less than Rs.1 Crore or alternately two works of value not less than 50 lakhs each respectively (proof of each to be submitted) Bidder may associate with other firm through valid MOI/ Agreement to enrich their experience/eligibility. However, they have to mention clearly who the lead partner is. The responsibility to complete the assignment successfully will rest with the lead partner only.
- b. The bidder should have sufficient skilled manpower, technically qualified supervisors, technically qualified service team, scaffolding equipments and machineries required for the satisfactory and smooth execution of work and for the proper maintenance within the guarantee period and thereafter.
- c. The bidder should have sufficient technical knowledge about the hardware components and other materials used for the work.

(2) Financial

- a. The bidder must have sufficient financial back ground for executing the work
- b. The agency should be registered in India at least for last 5 years
- c. Agency should have valid PAN Number
- d. The agency should also have GST Registration.
- e. The Audited Financial Statement (Profit & Loss, Account Balance Sheet) for the last 3 years need to be submitted.
- f. Copy of Income Tax Returns for the last 3 years should also be submitted.

6. *Other conditions*

- a. A technical discussion session with the shortlisted firms will be arranged on 27.11.2020 at 11.00 am at the Kerala University Senate Chamber. Shortlisted firms/agencies can participate in the technical discussion/presentation to seek clarification regarding the EoI and further

execution of the work. No further enquiry on any manner will be entertained. Those who wish to participate in the technical discussion session should carry a valid ID card issued by the firm/agency to prove their identity. NO TA/DA will be paid by the University for attending the technical discussion session. If the meeting is held online those who wish to participate may send their response to e-mail adb2sectionadmn@gmail.com based on which the link will be provided to them to join the meeting.

- b. Any subsequent corrigenda/clarifications will be made available on <https://keralauniversity.ac.in>
- c. Electrical installations and allied works should be carried out through licensed workers/sub contractors only. All mandatory stipulations of the electrical inspectorate and other statutory bodies must strictly be followed during the execution of the work.
- d. All the works should be carried out under the supervision of the University officials.
- e. Only genuine accessories/components should be used for connecting of hardware items.
- f. If the manufacturer insists on any stipulations to be followed for the execution of the work/installation of the hardware, the bidder is bound to execute the work as per the manufacturer's stipulations.
- g. The whole work will cover under a guarantee for a period of five year from the date of completion of the work irrespective of individual warranty provided by manufacturers for individual items. It is the responsibility of the bidder to repair or replace the defective items within the guarantee period without any additional payment for material cost and labour charges.**
- h. Testing and commissioning of each theatre class room should be done separately in the presence of the University officials. Payment for the work will be done only after satisfactory completion of the work.
- i. The bidder should agree to make presentations related to the information sought in response to this bid, if required.
- j. The bidder shall bear all the costs for participation in the EoI process including preparation of technical and financial bid and must be ready to undertake this activity on his own.

- k.** Participants declared by any government department/agency to be ineligible to participate for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices shall not be eligible.
- l.** Breach of general or specific instructions for bidding, general and special conditions of contract with the University during the past 5 years may make a firm ineligible to participate in bidding process.
- m.** Any false information provided with the tender with respect to citations, Projects handled, Office locations or any other information would lead to disqualification of the bidder and other suitable penal actions.

7. Time of Completion of the work

- a.** The time of completion for the work is ***FIVE months from the date of award of the contract***. Time is the essence of this work. The bidder shall complete the work in the scheduled contract period.
- b.** Fine for the delay in completion of work will be realized from the contractor as per clause 2112 and 2112 (1) of Kerala PWD manual.

8. Submission of Eol

Bidders should submit their technical documents along with all supporting documents in proof of the eligibility criteria listed below, along with the letter of intimation and duly filled in proforma (attached at the end of Eol document). Proposal must be submitted in hardcopy on or before the scheduled date.

The following documents should be submitted along with the Eol:

- a. Letter of intention in annexure -2
- b. Attested copies of PAN CARD, GST REGISTRATION CERTIFICATE, LICENSE FROM STATUTORY BODIES IF ANY
- c. List of works executed in annexure-3
- d. Documents to prove the financial position of the bidder
- e. Audited statements for the last three years
- f. Details of skilled and technical manpower in hand with the bidder (In company letter head)

- g. List of associates if any (In company letter head)
- h. A self declaration of the bidder showing that the bidder or their associates are not black listed in India/Abroad for the last seven years (In company letter head)
- i. Design and drawing of a typical theatre class room
- j. Detailed technical specification of items under networking and hardware.
- k. Non priced bill of materials with make and model number

10. Evaluation Process

- a. University of Kerala reserves the right to accept or reject any or all the EoI without assigning any reasons thereof.
- b. The expert committee constituted by the University of Kerala for the aforesaid purpose shall evaluate the EoI with all supporting documents & documentary evidence. Non production of requisite supporting documents or documentary evidence along with the bid, may lead to rejection of the EoI.

04-11-2020

**Sd/-
REGISTRAR**

ANNEXURE-1 -LIST OF THEATRE CLASS ROOMS

<i>DIAMENSIONS OF PROPOSED THEATRE CLASS ROOMS IN 40 DEPARTMENTS IN THE UNIVERSITY OF KERALA</i>							
Sl. No :	Department	Room No:	Floor	Dimension (LxW) (metres)		Height (metres)	Area (m ²)
				L	W		
1	Malayalam	60/61	SF	12.85	7.65	3.60	98.30
2	Tamil	59	SF	9.50	6.43	3.60	61.09
3	Linguistics	85	TF	7.00	6.28	2.75+ro of	43.96
4	Sanskrit	35	FF	7	6.2	3.6	43.40
5	Hindi	13	GF	7	6.45	3.6	45.15
6	IMK	2.18	GF	11.77	6.2	3.05	72.974
7	Law	LH- 1 (215)	FF	17.6	6	3.05	105.6
8	Commerce	2nd M.com finance	FF	11.75	6.05	3.05	71.0875
9	Political Science	Latin American Studies	GF	16.14	6.1	3.4	98.454
10	Sociology	Seminar hall	SF	9	6.1	3.4	54.9
11	Economics	203	FF	9	6.1	3.4	54.9
12	ORI	Seminar hall	FF	8.3	5.6	False ceiling	46.48
13	Islamic Studies	101	GF	10.3	4.8	3.5	49.44
14	Archaeology	New Block	GF	9.3	6.12	3.5	56.916
15	Dept. Zoology	MSc I/II Semester	SF	9.15	9	3.5	82.35
16	History	Seminar hall	BF	12.25	6.1	2.45	74.725
17	SDE	L- 22	SF	15.3	6.1	3.5	93.33
18	Arabic	Seminar hall	FF	9.45	6	3.4	56.7
19	Philosophy	Seminar hall	FF	8.3	5.25	3.1	43.575
20	Journalism	Class room I	SF	9.15	8.95	3.45	81.8925
21	Botany	MSc final	GF	9.1	5.9	3.45	53.69

22	Kerala Studies	DKS - 13		4.4	12	3.45	52.8
23	Chemistry	MSc. Junior Class room(No number)	SF	11.76	5.15	3.60	60.56
24	Physics	Auditorium	GF	11.90	10.25	5.30 (average)	121.98
25	Bio chemistry	Seminar hall (302)	SF	20.83	7.22	3.05	150.39
26	Computer science	Seminar hall	SF	11.67	7.65	2.6(false ceiling)	89.28
27	Statistics	Lecture Hall-2	GF	7.65	6.1	3.6	46.665
28	Geology	Seminar hall	GF	12	7.6	3.6	91.2
29	Bio Technology	Seminar hall	FF	11.55	6.3	3	72.765
30	Demography	Seminar Hall	GF	8.7	7.75		67.425
31	Psychology	Class room 2	SF	9	7.6	3.6	68.4
32	Mathematics	Lecture Hall-1	SF	9	7.6	3.6	68.4
33	Aquatic Biology	Auditorium	GF	21.87	8.7	3.6	190.269
34	Future Studies	Class room- 2	SF	9.18	5.75	3.6	52.785
35	Environmental science	18	SF	13.65	6	false ceiling	81.9
36	Opto electronics	F35	FF	12.4	6.13	3.6	76.012
37	Bio Informatics	Class room	GF	7.9	5	3	39.5
38	Dept of Education	Seminar Hall	FF	14.5	9.25	4.5	134.125
39	Dept of Music	Auditorium	GF	13.66	7.24	5	98.8984
				7.94	4.2		33.348
		Total					132.2464
40	Library Science	Class room	FF	9	5.4	4.5	48.6

ANNEXURE-2 -LETTER OF INTENTION

Company Letterhead

[Date]

From

.....

To

The Registrar
University of Kerala
Thiruvananthapuram

Reference: EoI for Implementation & Maintenance of the Theatre Classrooms in various Teaching Departments of the Kerala University.

Dear Sir,

This is to notify you that our company intends to submit EoI for designing, implementing and maintaining the Theatre Classrooms in various Teaching Departments of the Kerala University.

1. Name of the Bidder	
2. Address	
2. Email ID:	
3. Mobile No:	
4. Landline number if any	
5. Name, designation and address of the authorized legal representative and signatory of the bidder	

6. Name , designation , address and other contact details of the Contact person to whom all correspondence is to be addressed in respect of this EoI	
7. Name and address of the contact head office	
8. Details of EMD produced	

The EoI in sealed covers superscribing the name of work are enclosed herewith.

Encl:-

Yours faithfully

(Authorized signatory)

(Company seal)

ANNEXURE-3 LIST OF WORKS EXECUTED

Sl No	Name of organization	Amount of contract	Year of execution	Time of completion as per agreement	Actual date of completion	Name of address of contact person

Signature;

Name and address

(Office seal)

NB:- attach attested copies of client certificate/experience certificate to prove the work experience.