NOTICE INVITING EXPRESSION OF INTEREST

Kerala State Technological University, Thiruvananthapuram, invites sealed Expression of Interest (Bid) for the design, development, supply, installation and maintenance of e-Governance System for various activities and functions of the University.

The vendor must be an approved Total Solution Provider (TSP) by the Government of Kerala in the field of Information Technology specifically in Software Development as per GO (Ms) No.62/99/IT dt 22.04.1999 or subsequent revisions.

The software requirements for the e-Gov system are given in Annexure. The last date for submission of EOI (Bid) is 15.11.2014 at 3:00 p.m at the office of University.

Vice Chancellor
NOTICE INVITING EXPRESSION OF INTEREST

No. 54/KTU/2014  Date: 06.11.2014

Kerala State Technological University, Thiruvananthapuram, invites sealed Expression of Interest (Bid) for the design, development, supply, installation and maintenance of e-Governance System for various activities and functions of the University.

A. Definitions

In this document and associated documentation, the following terms shall be interpreted as indicated:

a) The Purchaser" means Kerala state Technological University
b) "The Indenter" means Vice Chancellor, Kerala state Technological University
c) The Competent Authority’ means Vice Chancellor, Kerala state Technological University
d) The Specification" means the specification specified by the purchaser.
e) “Vendors’ means the firms who respond to this Expression of Interest.
f) "The Goods" means the ERP software, which the vendor is required to design, develop, and supply to the Purchaser under the Contract;
g) "Services" means services ancillary to the supply of ERP software, such as installation, commissioning, maintenance, technical support, training, on-site comprehensive warranty, up-gradation and other obligations of the vendor covered under the Contract.

B. General Conditions

1. The vendor must be an approved Total Solution Provider (TSP) by the Government of Kerala / Government of India in the field of Information Technology specifically in Software Development as per GO (Ms) No.62/99/It dt 22.04.1999 or subsequent revisions.
2. The software to be designed and supplied should conform to industry and OPEN standards and preferably open-source in powerful framework.
3. In case of any reduction in the price due to Government levies/duties, the price reduction has to be passed onto the Purchaser provided the entire work is executed within one week of the announcement of the price reduction.
4. The vendors should conduct a thorough appraisal of the hardware and peripherals and assess the compatibility to operate their software and submit a list of hardware, peripherals and other accessories with detailed specifications that are required for installation of the ERP software.
5. In case the vendor has not indicated any hardware, peripherals and accessories along
with the bid, which are required for implementation of the solution, the vendor has to provide them without charging any extra amount, apart from the order value.

6. The vendor should have experience of having successfully executed similar types of projects. At least one software project must have been successfully completed with a total cost not less than 50 Lakhs. (The “similar nature” defines the experience in ERP based IT-Projects/e-Governance projects. Vendors have to submit the documents at Annexure I).

7. The software requirements for the University automation are given in Annexure II. The last date for Technical solution submission is **15.11.2014 at 3:00 p.m**

8. Expression of Interest received after the due date and/or not submitted in the prescribed formats or in the prescribed manner, incomplete in any respect or not accompanied by prescribed documents are liable to be rejected.

9. The Purchaser reserves the right to accept or reject any expression of interest as also to alter any or all of the terms and conditions without assigning any reason therefore.

10. The Contract shall cover comprehensive up-gradation of the software for a period of FIVE years from the date of commissioning of the software in all respects.

11. The decision of the Competent Authority in respect of evaluation of bids and/or award of contract will be final.

12. The vendor shall not have any objection regarding the third party examination and certification of software installation, by the Purchaser during the contract period.

13. The vendor prepares and submits an Expression of Interest, which contains only technical document and Hardware/ Software specifications. Do not submit Financial bid along with the technical bid (Financial bid form will provide by the purchaser for the successful bidder).

14. The sealed Expression of Interests complete in all respects, should be submitted on or before the due date, by way of Speed post/ Registered Post and soft copy to:-

   **The Vice Chancellor**

   **Kerala Technological University**

   **CET Campus, Thiruvananthapuram -16**

Vendor should ensure that the Bid reaches the above address on or before the due date and time. The EOI (Bid) shall be sealed and super scribed **“Expression of Interest (Bid) for the Kerala Technological University ERP”**.
C. Instruction to the Bidders

1. Project Management after the award of the Project
   (a) The vendor has to present a project management plan with the tasks and their durations specified in standard Project format to the purchaser.
   (b) The proposed project plan will be discussed by the Purchaser with the vendor and accepted after necessary modifications.
   (c) Project development and implementation should be strictly according to the mutually agreed project plan finalized in (1a) above.
   (d) The project implementation is considered in a phased manner and the vendor must clearly specify the implementation plan in the submitted project plan.

2. Delivery Location
   The Software and hardware should be installed at the Technical centre specified by the Purchaser. Vendor shall be responsible for ensuring proper installation, commissioning and working of the software in all respects. The complete set of operational manual in soft and hard copy form, source code, design and other documentation required for the continued maintenance should be provided to the Purchaser.

3. Delivery Period
   The Software should be delivered and installed within a phased manner starting two calendar months from the date of purchase order. The delivery period shall include time taken for all development and other procedures.

4. Warranty
   (a) Vendor shall have to provide a comprehensive, on-site, post commissioning warranty of forty-eight months for the selected software from the date of acceptance of the system.
   (b) If the software does not correspond to the description/need of the Purchaser, the Purchaser shall have the right to reject the agreement and to claim the damages.
   (c) In case of staggered execution the acceptance of the date of commissioning shall be considered for commencing the warranty period. The Vendor shall issue a Certificate of Warranty to the Purchaser.

5. Installation
   The Vendor shall take full responsibility of installation of the software at site at its own cost. The Software supplied and installed shall have appropriate licenses and the vendor shall provide licenses and installation certificates to the Purchaser on commissioning of the system.
6. **Commissioning**

   It shall be the responsibility of the Vendor to undertake all activities on commissioning of the software at site at its own cost. The Purchaser on testing the satisfactory performance of the software and systems will issue the Certificate of Commissioning.

7. **Acceptance Terms**

   Software acceptance test shall comprise of
   - Verification of the software
   - Performance tests (separately for each modules)
   - Other tests as may be deemed necessary by Purchaser.

   (a) Vendor shall have to guarantee that the supplied software shall meet the performance requirement as demonstrated during the evaluation phase. Vendor shall have to augment the software at its own cost and expenses, if the supplied software does not meet these performance requirements.

   (b) Vendor should successfully complete all the acceptance tests within two weeks from the beginning of the acceptance testing at site.

   (c) The Purchaser reserves the right to reject the software, if any delay exceeds a period of four weeks. In the event of the cancellation of the order, the vendor shall repay to the Purchaser the full advance amount, and any other amounts paid to the vendor, with damages.

8. **Acceptance**

   The warranty period shall commence from the date of certification of commissioning of the software by the Purchaser. The acceptance certificate will be issued by the Purchaser only after clearing all the outstanding issues and on certification by an Expert Committee duly constituted by the Purchaser that the Software commissioned has met all the technical and operational parameters.

8. **Maintenance**

   The maximum time to repair a reported breakdown should be twenty four clock hours (excluding holidays). Time for this purpose shall be measured as interval between the time of reporting the problem and the time when the problem is fully solved making the faulty components/functions fully operational.

9. **Support Strategy**

   Vendor shall provide effective maintenance support to the Purchaser including training to end-users and support personnel. In case the Purchaser intends to upgrade or revise the software during the proposed warranty period, the vendor shall replace the software
accordingly.

10. **Training**
    Vendor shall provide different levels of training to all the end users at the premises of the Purchaser, as and when specified by the Purchaser, free of charge. The training should cover features of the software and include hands-on-training and exercises. The modules of the training shall be drawn up in consultation with the Purchaser. The training module should comprise:
    - Schedules as per user convenience
    - Sufficient copies of comprehensive material, books and hand-outs
    - Courseware and other publications meeting University’ needs.

11. **Documentation**
    Vendor shall have to supply all necessary software documentation and documentation for the training, use and operation of the software. This shall include original copies per location of the user manuals, reference manuals, operations manuals etc.

15. **Termination**
    The Purchaser reserves the right to terminate the contract by giving due notice in case of breach of any of the material obligations under the contract, if committed by the vendor, during the contract period. The contract may also be terminated in case of any unsatisfactory service performance during the contract period with due notice.

16. **Penalty**
    Vendor shall have to pay liquidated damages to the Purchaser @ one percent (1%) per week on the unexecuted value of the order inclusive of all taxes, duties levies etc., per week or part thereof, for late delivery beyond the delivery period. There shall be an upper ceiling of ten percent of the gross amount for the penalty to be deducted for any orders. The penalty applicable on the entire order amount shall be deducted from the payment amount due after acceptance of the software.
    The Purchaser reserves the right to cancel the entire order or part thereof, if delay exceeds two weeks from due date of delivery. All statutory taxes and duties shall be payable by the Vendor and/or recoverable from the payment to be made to the Vendor.

17. **Arbitration**
    In the event of a dispute or difference of any nature whatsoever between the Purchaser and the vendor during the course of the assignment arising as a result of this proposal, the same shall be referred to an Arbitrator to be nominated by the Kerala State Technological University (Purchaser). The Arbitrator so nominated shall be a person in
the status of a retired High Court Judge or a retired District Judge. The notice for nominating an arbitrator shall be given within three months of the date of raising the dispute of difference. The provisions in the Arbitration and Conciliation Act 1996 will be applicable.

18. Jurisdiction
The jurisdiction for the purpose of settlement of any dispute of differences whatsoever in respect of or relating to or arising out of or in any way touching this contract or the terms and conditions thereof or the construction and/or interpretation thereof shall be at Thiruvananthapuram.

19. Indemnity
The vendor shall, during the subsistence of the agreement, indemnify the Purchaser from all the claims, losses and damages caused by the negligence of vendor's personnel to any person or property arising out of the use or possession of the equipment or location by vendor or its personnel, as also arising out of any defect in title to the goods.

20. Confidentiality
The vendor shall keep confidential any information obtained under the contract and shall not divulge the same to any third party. In case of non-compliance of the confidentiality agreement, the contract is liable to be repudiated by Purchaser. The Purchaser shall further have the right to regulate vendor staff.
The vendor shall not divulge to any person handling other divisions, subsidiaries or groups of the vendor and its service support agency any information obtained by it in the course of its execution of its work and all the information gathered by the vendor shall be treated as professional communication and confidential. Any violation of this clause shall be liable to cancellation of the contract and invoking the bank guarantee without notice to the vendor.

21. Standards
All standards to be followed shall adhere to Bureau of e Governance, Central Government of India specifications or other acceptable standards for software.

22. Information to successful bidder
The information to successful vendor will be officially communicated for submitting the financial bid and technical specification of the hardware / software with detailed proposal for the installation and maintenance.

D. Scope of the Work
The scope of implementing e-Governance System in the Technological University is to create a comprehensive and integrate the activities of University for effective, efficient and timely way through a campus wide network and through the Internet with a bottom-top approach in accordance with the principles of e-Governance. The key objective of this project includes:

- Providing enhanced IT tools for administration, planning, finance, academic, teaching, examination and other University functions
- Increasing operational efficiency by reducing manual and repetitive tasks
- Better communication and automation at the back-end
- Sharing intelligence and information on real-time basis
- Improving service delivery to the students, public and other stakeholders

**Functional Scope**

The University Application Software comprises of the common University functionalities that would be a collection of services that would be deployed in Universities. It would focus primarily on functionalities at Technological University. The following are the main functional blocks that would comprise based on the order of preference (implementation)

- Administration
- Academic
- Examination
- Finance
- Planning
- General
- Teaching Department
Annexure I

Documents to be produced for fulfilling eligibility criteria

1. Brief profile of the TSP
2. Proof of the financial turnover for the past three years.
3. Audited Accounts consisting of balance sheet, profit and loss account with schedule notes and audit report under Companies Act / Income Tax Act for the last three financial years.
4. Address of vendors at different locations.
5. List of current clients - Universities / Educational Institutions
6. A certificate from the clients (Universities / Educational Institutions) regarding the software developed, installed and maintained by the vendor should also be enclosed.
7. Note:
   a. IT-projects’ relates to projects involving IT Application Development, Integration with legacy systems, Deployment and Maintenance
   b. e-Governance projects’ is defined as ‘deployment of IT systems for Central/ State Education Departments or Center/ State Universities.
   c. ‘Software Services Project’ relates to projects involving development or deployment of an IT application and Maintenance of the same.
Annexure II

Requirements for the University automation

The major requirements that are summarized with order of implementation preference is given

1. Overview of Administration Requirements

The proposed system is required functional modules that can deploy based on user roles. Each user in the system will have a unique id and login facility to login to their corresponding domains. Any activity that changes the data will be recorded by maintaining a logging system and with proper session data for each user. Implementing a provision to dynamically set file flow that envisages the adaptability of the proposed system to be configured to Technological University structure will be a major promotion of the existing computerization efforts. Human Resources Administration is identified as a major area to be computerized and is divided into well-defined functional modules. Maintenance of an HR Portal is proposed where each User can view his entire service details thereby saving a lot of human labor just for a simple enquiry. Authorization and authentication of users and requests should be dealt with utmost care. The major requirement areas are

- University main site
- Recruitment
- HR Portal (Service Book & GER)
- Purchase Management
- Store Management
- Tours & Claims
- Grievance & Issue Tracking
- Quality Assurance Cell
- Audit/Inspection Management
- Halls and Stadium Management
- Vehicle Management
- Boards and Meetings
- Non Plan Fund Management
- Engineering and Other Dept. Supporting Admin.
- Pensions
2. Overview of Academic Requirements

Requirements Analysis and Business Process Modeling have been carried out through detailed study of all the Functions and Workflows of Academics portfolio towards the preparation of Functional Requirement Specifications the system. Figure 1 shows the functional blocks of the academic division. Figure 1 shows general schematic of academic activities.

![Figure 1. General schematic of academic activities](image)

**Functional Activities**

- Web portals
- Affiliation of Colleges (Figure 2)
- New Course / Curriculum formation
- Approval of Scheme and Syllabus
- Fixation of Fees
- Course Management
- Preparation of academic calendar
- Constitution of Academic bodies
- Conduct of Meeting
- Student Admission / Centralized Allotment
- Late Application and Late Admission
- Re-Admission / Lateral Entry
- College Transfer / Inter University Transfer
- Condonation of shortage of attendance
- Token Admission
- Additional Degree
- Recognition of Degree/Diploma/Certificate of other Universities
- Issuance of Certificate
- Issue of Official Transcript of Scheme and Syllabus
- Refund of Fees
- Maintenance of Establishment Register
- Approval of Appointment of Teaching Staff and Coordinators
- Appointment/re-engagement / termination of teaching staff
- Faculty Development Programme for teachers
- Transfer and Posting of staff within the branch
- Accord of Recognition as Research Centre
- Recognition of Research Guide
- Doctoral Degree Admission
- Conduct of Doctoral Programme
- Fee processing for Research Scholar
- Conduct of workshop
- Accord of Sanction for the Settlement of advance receipt
- Processing of Fellowships / Scholarships
• Legislative Assembly Interpellation/Senate Interpellation
• Furnishing of Information under RTI Act
• Preparation of writ petition
• Placement Services Portal
• Student Information portal
• College Login / College portal

3. Overview of Examination System

The examination process contains three different levels, which are student level, college level and University level. In student level, they have to register every examination with their course details with the examination fee. The colleges have to prepare the internal marks, attendance register and practical exam marks and send them to the University. Sometimes colleges will register student’s details with examination fee to the University.

The major part of the examination process is carried out by the University and that includes examination time table preparation, question paper settings, examiners list preparation, conduct examination, valuation, tabulation, generates mark list and degree certificate generation. Figure 2 shows the general students life cycle management in the University.

![Figure 2. Students life cycle management](image-url)
4. Overview of Finance requirements

The objective of the e-Governance system is to deliver the services from initiation to completion of all University activities through electronic channels, as far as possible. For the users of the system, the browser based application accessed on the intranet or internet, through single-sign-on mechanism, will provide access to all the core services. A centralized architecture has been proposed for the University. The proposed System would be installed at central data centre of each University. All requests from users will be sent to the systems, located at a central place for processing. All users will access the application through local or remote terminals using a browser. A backup for the University is also suggested.

Major features required for the System are:

- Web-based application for comprehensive management of Finance activities.
- Centralized Data storage, which will integrate all other services of a University.
- Built on Open Source Platform.
- Portal Interface for Students to remit fees online using e-banking facilities.
- Portal Interface for government recognized external agencies to collect fees etc.
- Analytical, Statistical & Graphical reports.
- Budget Proposal & Estimation
- Annual Accounts Statement
- Computation of Payroll, PF, Pension, etc.
- PD Registers & Settlements
- Accrual System for Accounting.
- Project Management System for Research Projects.
- Off-line System for Cash Counters

5. Overview of Planning Division Requirements

Receive proposals against an intimation forwarded or resubmitted from departments and colleges

- Accept or reject proposals from colleges and other stakeholders
- Forward the proposals within the University for approval (if necessary)
- Process the proposals to be included in the Annual State Plan/UGC Plan
- Approval of the plan
- Forward the plan to State Government or UGC
- Forward the proposal to funding agency
- View previous year’s budget plans and expenditure
• Budget Forecasting based on received proposals under an account head and previous years' expenditure
• Provision to generate reports from the proposals

6. Overview of General
The general requirements can be submitted after the successful completion of the system study. The University main site is an example of General system. Another example Engineering Unit, Construction Management etc.

7. Overview of Teaching Department
The e-University solution for teaching departments in the Technological University will provide a single window for secure exchange of documents and information electronically across its stakeholders involved in the departmental administration and the University including the students and other funding agencies. It also will provide global visibility and access to the central database to all its stakeholders through internet-based interfaces. The following are the key components of the solution:

• A centralized database to provide effective track, trace facility to all stakeholders, and act as a data repository for research, analysis and reports.
• A web based application that acts as a single electronic window for the University and its stakeholders to access the functionality of the proposed system.

The identified Teaching department functionalities are a grouped into the following

• Portal Service for Teaching Department
• Departmental Administration
• Project Management
• e-Learning module