



बसु बिज्ञान मन्दिर  
BOSE INSTITUTE

Unified Academic Campus, Block-EN 80, Sector V, Kolkata-700091

BI/EOI/01/2024-25



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Unified Academic Campus, Block-EN 80,  
Sector – V, Kolkata 700091

## Expression of Interest

*for*

Off the shelf ERP Solution consisting of  
HRMS/Payroll/Store/Purchase/Accounts  
and its Hardware

To be addressed to :

Registrar (Officiating)

BOSE INSTITUTE

Unified Academic Campus, Block-EN 80,  
Sector – V, Kolkata 700091

[registrar\\_office@jcbose.ac.in](mailto:registrar_office@jcbose.ac.in), [bipurchase@jcbose.ac.in](mailto:bipurchase@jcbose.ac.in)



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**Disclaimer:** This EOI is not an offer by Bose Institute or a tender document, but it is an invitation to receive responses from eligible interested parties. The purpose of this EOI document is to gather necessary information regarding procurement of Off the shelf ERP solution as per **Annexure-I**.

**Commercial Terms:** This EOI is non-commercial and no remuneration in any way whatsoever shall be paid to the entities participating in EOI.

**Name of the Requirement:** The solution covers, installation, commissioning, testing, gap analysis, optimization, training, and maintenance of Fund Based Accounting, Central Govt. Payroll processes with Employee Self Service (ESS) process and Extra-Mural Grant (Research Grant) Administration Management Software Solution for **BOSE Institute**, Kolkata

The automation solution should be accessed and operated over the Intranet/Internet using any modern browsers such as Google Chrome, Mozilla Firefox, Apple Safari, Microsoft Edge Web Browser, etc. running on Windows/Linux/Macintosh workstations as well as on mobile platforms (as a Desktop Version). The proposed solution should be entirely hosted and managed in a MEITY empaneled cloud service with a 24/7 serviceability over the Internet by the service provider with a provision of local hosting on the present/upgraded infrastructure in the BOSE INSTITUTE premises. It includes initial system setup including data migration, data backup, and maintenance.

## **ABOUT THE BOSE INSTITUTE**

Bose Institute is a grant-in-aid autonomous institution under the Department of Science and Technology, Government of India. The Bose Institute was founded by Acharya Jagadish Chandra Bose in 1917 for the advancement of science and



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dissemination of knowledge. In his foundation day speech, Acharya declared that “I dedicate today this Institute – not merely a laboratory but a temple”. Thus, Bose Institute is also known as the Vigyan Mandir or Temple of Science.

**Areas of research:** Earth and Atmospheric Science, Chemical Sciences, Life Sciences & Physical Sciences.

**Website:** [www.jcbose.ac.in](http://www.jcbose.ac.in)

**Pre-qualification Criteria**

- **BOSE INSTITUTE will need a ready-to-use ERP system that is successfully implemented** in reputed government or government-funded institutions rather than developing a new one. However, the bidder must customize the system according to the BOSE INSTITUTE's requirements.
- The proposed ERP software must be a perpetual license for the BOSE INSTITUTE with unlimited access for the users. The supplier may ensure unlimited user access for the proposed ERP.
- Detailed plan of training for the users.
- Backup, restoration, system fail-over management features. The system must provide an easy-to-use interface for full data/system backup and restore facility.
- Security features include data/system access hierarchy and information flow, digital signature, system and communication encryption, and storage of passwords.
- Enable automatic notification systems such as email, and SMS in the ERP application for various transactions and these are event-based and/or proactive alerts.
- Advanced and full text searching features with versatile viewing options, and graphical views wherever possible.
- Easy and Comprehensive user manuals with online help features.
- Event Log/Audit Log features
- Less paper usage features with online approval processes which are workflow-based.
- The solution should be compatible with or automatically upgradable to current and/or future versions of the Operating System (OS).
- The bidder/vendor shall mention the support eco-system for BOSE INSTITUTE, both from technical and functional aspects, this is applicable during the implementation and post-go-live process.



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- The Supplier shall provide AMC support and maintenance of the ERP package, tools, accessories, and any service provided as part of the product solution. During this period, the AMC shall include technical and functional support and maintenance of the ERP system, RDBMS, etc. which form part of the ERP product's solution.
- Suppliers must maintain the confidentiality of the data that they get access to during the implementation and maintenance of the ERP software. An Agreement in this regard must be signed between the Institute and the chosen vendor soon after the order is placed and before the supply and implementation of the ERP solution.
- Providing On-site resources for effective and smoother operations of ERP.
- The bidder, in general, will respond to any issue raised by the user within a reasonable time (that is based on critical, moderate, and general) once notified by the authorized person from BOSE INSTITUTE. The bidder should provide an escalation matrix for the delay in responding to the queries.
- The bidder should be a Registered Company in India with valid GST Registration, company registration certificate, and PAN number allotted by the respective authorities. Supporting documents should be submitted.
- Only Bidders who are the original developers of the ERP systems/Certified authorized partners of the respective OEM of the offered ERP Product should submit the bids.
- The application should have the framework/basis on the principles of *FUND accounting (Accrual system)* & with **GFR** Compliance and should adopt any new order issued from time to time by Government of India.
- The proposed ERP software should have CERT-In Certification for Web Security.
- The bidder must have successfully implemented similar ERP systems (Academic Institute Management/Campus Management software) for at least **three (03) Central Govt./Govt funded Autonomous Research Institutions**. Details of such a job carried out by the bidder shall have to be furnished with a copy of the work order. A certificate from the clients indicating successful implementation of the package **IS REQUIRED TO BE ATTACHED**. *Self-declaration of the work done shall not be considered*.
- The bidder, if blacklisted by any State or Central Government in India or abroad, shall not be considered. An undertaking in this regard shall have to be furnished by the bidder on letter head of the bidder.
- The bidder should have a support center in Eastern India (Address and Contact No. must be mentioned). Firms not having the support Centre at the time of submitting bids may submit an undertaking in the prescribed format. The objective of this is to give/extend the on-site support for a mutually agreed time so that the end-users will have an easy adoption of the proposed solution.



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- The bidder/Supplier shall ensure the deployment of sufficient specialized and experienced manpower throughout the project to complete the implementation & stabilization of the ERP System in time successfully.
  - We encourage bidders to provide a solution that could be hosted on a Windows/ LINUX environment. BOSE INSTITUTE will not procure any 3rd party solutions, dependencies, or licenses. However, the provider may supply required dependencies at their own cost. The system should run on secure web-based protocols.

**Hardware:**

- **The current expectation from the BOSE INSTITUTE is that the Bidder to provide/supply the IT infrastructure through MeitY (Ministry of Electronics and Information Technology) empaneled Cloud Service Provider.**
- High Availability Database and Application Server including Backup solution with all necessary Software like OS/Database etc., need to be identified and installed as per the requirement of the ERP system in the MeitY empaneled cloud space.
- Vendor also needs to take care of all configurations& set up of the environment for the proposed ERP solution.
- Additional hardware requirements, if any, for successful implementation and operation of the proposed ERP solution should be provided by the Bidder, including Servers, Storage, Backup solution, and any other items required as applicable at BOSE INSTITUTE, Kolkata.
- Bidder is also required to provide technical details of all additional hardware and requirements, including Servers, Storage, Backup solution, and any other items required to host the ERP solution locally.
- In the upcoming timeline, BOSE INSTITUTE may develop a robust on-site data center and may request the ERP vendor to migrate the ERP to the on-premises infrastructure at no additional cost.

**Key Deliverables:**As per Annexure-I

**Format for Pre-Qualification Criteria:**

- The bidding process is open to only the OEM Integrated modules of BOSE INSTITUTE.
- Detailed Scope of Work, while meeting the defined mandatory Qualifying Requirements given in the Table below.



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<b>Sl. No.</b>	<b>Mandatory Eligibility Criteria</b>	<b>Evidence Required</b>
01	Bidders must be in existence in India in the areas of ERP software solution selling & Implementation.	Date of incorporation for the mentioned criteria. Other relevant documents must be provided by the bidder with self-attested by the authorized signatory of the bidder
02	Bidders should have PAN, GST, and Registration Certificates.	All the supporting documentary evidence for the mentioned criteria must be provided by the bidder with self-attested by the authorized signatory of the bidder.
03	The Bidder should be a certified authorized Partner of the respective OEM of the offered ERP Product. The bidder should have valid authorization / certification from and an active relationship with the respective OEM(s) as of the last date of Bid submission.	Required Certificate(s)/ Authorization(s) from the respective OEM(s) have to be submitted.
04	Average Annual Turnover for the last 3 financial years (FY 2021-22, FY 2022-23 & FY 2023-24) as per Audited Annual Accounts. The Turn over of the Bidder from ERP Product / modules selling and/or its Implementation in the last three financial years (FY 2021-22, FY 2022-23 & FY 2023-24).	Audited Annual Accounts Statements (Relevant Schedules and Annexures, Statement of Asset and Liabilities & Profit and Loss Account) for the last 3 years (FY 2021-22, FY 2022-23 & FY 2023-24)
05	Number of direct Contract Agreement of the bidder with Any Central Govt./Govt funded Autonomous Research Institutions have been terminated in the last seven (07) years as of the date	Self-declaration / Certification by the last signatory of the submission of the bid.



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06	The Bidder shall not be under declaration of ineligibility for corrupt or fraudulent practices or blacklisted or debarred in the last five years by any Department / Agency / Organization of the Government of India for non-satisfactory past performance, corrupt, fraudulent, or any other unethical business practices.	Self-Declaration / Certification by authorized signatory.
07	The bidder should have a well-established presence in India with a support base implementation and support for the solution & services and adequate timely evidence in respect to submission of the bidder	A declaration letter by the authorized provider along with the proposed Integrated ERP documentary along with the ability to provide respect of response and service to the owner.
08	The bidder must have successfully implemented similar ERP systems (Academic Institute Management/Campus Management software) for at least three (03) Central Govt./Govt funded Autonomous Research Institutions each involving implementation of a complete workflow based Enterprise management solution (ERP solution) of similar nature on Windows/Linux/Unix platform in any reputed as on date	Self-Declaration' Certification by the authorized signatory of the OEM of proposed ERP and by the authorized signatory of the bidder along with all appropriate supporting documentary evidence (such as order copies/ completion certificates) for the mentioned criteria

**Note:**

- All self-certificates and documents must be signed, sealed, and dated, in original by the Authorized signatories of the Implementation. Partner and Bidder, unless specified otherwise.
- Internal implementation including implementation in subsidiary companies of the bidder/ consortium partner will not be considered as required qualifying credentials.



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**Documents to be Submitted:**

The following documents are required to be submitted as part of the response to this EOI:

1. Document supporting Eligibility Criteria.
2. Case study (Max. 2 pages) on the work performed under Eligibility Criteria.
3. An introduction of the entity submitting the proposal (Max 1 page)

**Bose Institute reserves the right to select or reject any of the proposals received against this EOI.**

**Important Guideline for Submission:** Eligible entities who have competence and experience to carry out such work are requested to submit the EOI alongwith supporting documents through e-mail to [registrar\\_office@icbose.ac.in](mailto:registrar_office@icbose.ac.in) with a copy to [bipurchase@icbose.ac.in](mailto:bipurchase@icbose.ac.in) to reach on or before 18:00 pm (IST) on 09<sup>th</sup> September, 2024. Hardcopy of the documents is required to be submitted by 11<sup>th</sup> September, 2024 till 18:00 pm (IST) to “The Registrar(O), Bose Institute, Unified Academic Campus, Block-EN 80, Sector-V, Salt Lake, Kolkata 700091 by Speed Post/ Courier”. EOI title and EOI number should be mentioned at the top of the sealed envelope. The institute shall not be responsible for postal delays, if any.



## KEY DELIVERABLES

These are broadly expressed key expectations.

- **Human Resource Management Module (HRMM)**
- **ESTABLISHMENT / PERSONNEL DEPARTMENT**
  - Objective is to generate an eService Book - Entire Service Book module as per Centre's Permanent Staffs' Service Book.
  - Leave Management – for Permanent / Regular Staff -- As per CCS Leave Rules.
  - Leave Management – For Staff on Temporary Status
  - There is should be a provision of generating compact leave report of all employees as and when required either category wise (Permanent Staff, Temporary Staff or Contractual Staff), month or year wise and also leave category wise.
- **Employee's Payroll Management Module (EPMM)**
  - The payroll management should be in compliance to the Central Govt. Pay Structure which includes 7th Pay Commission Structures & its Arrears processes
  - Management of the employee profile / master with various attributes
  - Pay Fixation for Permanent Staff
  - Defining contract period (Contractual Employees)
  - Income Tax computations with various investments given by the employee should be rule driven and in compliance with the IT Statutory regulations
  - Employee Life Cycle in an Organization
  - **Should encompass in managing the entire processes of Reimbursements, Loans & Claims, etc.,** These are all should be defined and processed as per the guidelines and rules stipulated by Central Govt. of India
  - **Medical Reimbursement process:** The Centre is having a Contributory Medical Scheme (CMS) duly approved by the Department of Science & Technology, Government of India and guided by the Central Government Health Scheme (CGHS) rates for its employees and students.
  - Medical Reimbursement module should be created in such a way so that the entire history of an incumbent from submitting the bill to the payment of the bill can be traced. Module should show required details
  - Email pension slip, Salary slip, any reimbursement report.
  - Bulk invitation sent
  - Integration with in house email system.
- **Employee Self-Service Portal (ESS)**
  - This module enables the core / permanent employee access to review their related information through the ESS module.

- Employee Self-Service (ESS) Portal which empowers the employees to review, transact and manage their information with an exclusive log-in;
- The key expectation under ESS are:
  - Exclusive Login for every employee to review their salary slip; consolidated salary registers; Income Tax computation sheet
  - Declare Investments (to avail the benefits under Income Tax) online on periodic intervals – Generation of FORM12B for filing purpose
  - Online Leave Management with Review its approval process
  - Transact various types of Claims and its status – Claim type includes, TA/DA, LTC/HTC, Telephone Reimbursements etc. – All the guidelines; rules should be as per the Central Govt. policies.
  - Various reports should be enabled from the employee perspective
- *A P A R (Annual Performance Appraisal Report)*
  - Defining and Managing the Performance Appraisal Process based on the current rules as per Central Govt. of India with institution specific workflow.
  - Promotion management, Yearly Increment
- **ESTABLISHMENT / Scholars DEPARTMENT**
  - Objective is to generate an eService Book - Entire Service Book module as per specific format.
  - Leave Management –As per Project Leave Rules.
  - There is should be a provision of generating compact leave report of all employees as and when required either project/guide wise, month or year wise and leave category wise.
  - Scholars Self-Service (SSS) Portal which empowers the Scholars to review, transact and manage their information with an exclusive log-in;
  - The key expectation under ESS are:
    - Exclusive Login for every Scholars to review their stipend slip; consolidated salary registers; Income Tax computation sheet
    - Declare Investments (to avail the benefits under Income Tax) online on periodic intervals – Generation of FORM12B for filing purpose
    - Online Leave Management with Review its approval process
    - Transact various types of Claims and its status – Claim type includes, TA/DA, LTC/HTC, Reimbursements etc. – All the guidelines; rules should be as per the project policies.
    - Various reports should be enabled from the Scholars perspective

**Note: Integration is required from HRMM module to Website so that Scholars and Staffs name automatically updated from ERP module to Website**

- **Finance & Accounts (F&A) Management Module (FAMM)**
- **CORE GRANT (PLAN GRANT)**
  - Defining Chart of Account with Schedules and Sub-Schedules: As per

the Govt.'s common **format of accounting Structure and specific Institution requirement and process**

- Cash Book, Bank Book, General Ledgers/Sub-Ledgers, Trial Balance, Receipt & Payment Account, Income-Expenditure Statement, Statement of Affairs (Balance Sheet) and Details Schedule thereon (linked with Budget/GL head) / Voucher entry to be linked with PFMS/EAT
- Generation of GFR-12A Report
- System generated Bank Reconciliation statement
- GST related statements
- Budget Statement (BE-RE Statement)
- Financial Concurrence (FC) register (linked with BE-RE Statement and GL Heads)
- Bill pass register linked with Payment Voucher entry under maker-checker Concept (drop down selection of appropriate Budget/GL head as to be linked with FC register)
- Quarter-wise and Year-wise SE& UC (in prescribed format) for Salary, General and Capital
- Regular Payroll register (auto generated Salary journal linked with required deduction suggested)
- Employee-wise CPF/ NPS Deduction register with Employer's Contribution and Accumulation thereon
- Contractual Remuneration register
- Research Fellow stipend payment register linked with Academic Section
- Centre's Investment Register (incl. Interest accrual)
- Capital Asset wise Depreciation schedule (to be linked with FA Register as maintained by Purchase Department)
- Deposit (both EMD & SD) Register
- Sundry Debtors and Vendors/ Creditors Ledger
- Faculty Contingency details, utilization & accumulation thereon (Research lab expenses)
- All type of Employee Advances and recovery/adjustment thereon
- LTC (hometown and No-hometown) register
- Telephone bill register
- Employee-wise medical bill payment register
- Valuable register
- Receivable (HRA/Maintenance/ Medical) register from externally funded fellows (CSIR- UGC etc.)
- Students' Admission, Semester fees received register linked with Bank payment gateway and necessary Input from Academic Section
- Retirement benefit payment register (Gratuity/ Leave encashment)
- Managing exceptions with control
- Online Approval processes

• **EXTRA-MURAL GRANT MANAGEMENT – AN EXTENSION TO FAMM**

- Project Sanction to Utilization Certificate
- Defining Project Budget against the Sanction with relevant debit heads
- Capturing Overhead / Operating cost along with the respective project(s)
- Managing various transactions such as Cash Advance Requisition; Purchase Indent Requisition; Claiming of Bills against Advance / Reimbursement against each of the projects
- Provision for amending the project / sanction with approvals.
- Exclusive log-in for Principal / Project Investigator to manage / view their related projects and its transactions

- PI Wise Project Overhead details, utilization & accumulation thereon
- Project Staff Payroll Management – Linked to respective project and contract period.  
Compliance to relevant statutes
- Interface with PFMS/TSA system
- Zero-Bank Accounting Management
- Various Reports / Formats – As per the Funding Agency requirements
- **SCHOLARSHIP MODULE**
  - Defining various students who are entitled for Stipend
  - Defining respective Funding agencies who have funded each student towards the Scholarship
  - Defining Student wise - Funding agency wise - Debit Heads along with its Contingencies
  - Processing month-on-month stipend and generating its outputs
  - Enabling the Contingencies claims and its processing.
  - Fund Receipts and Payments to Students; Generating Grant-in-Aid; UC etc.
  -
- **Store & Purchase (S&P) Management Module (SPMM)**
- **PURCHASE ACTIVITIES**
  - Complete Purchase Management for both Core Grant & Extra Mural Grant should be managed in this specific module:
  - The entire purchase activities – Capital / Consumable or Foreign purchases should be aligned to **GFR and Central Govt.'s rules & policies.**
  - The purchase approval processes should be aligned to the Institution rules & GFR.
  - Their key deliverables are as follows:
    - Defining Vendor Masters with relevant attributes
    - Purchase Indenting activities
    - Quotation / Quotation Comparison processes
    - Purchase COMMITMENT Process (**As per GFR frame-work**)
    - Goods Receipt / Stock Receipt processes
    - Record purchase invoice received
    - Make partial or full payments per purchase order
    - Amendments to PO
    - Credit / Debit Note
    - Track Advance, bill settlement and Retention Separately
  - Procurement of stationary items and maintaining its inventory is also part of this module.
- **FIXED ASSET**
  - This module should be tightly integrated with the Purchase Process of Capital Items with the following features:
    - Asset Capitalization; Track asset with various parameters
    - The Asset Management is an integrated module that can electronically capture process, i n d e x , store, access, view, revise, report and archive asset information.
    - Depreciation Computations based on the set rules – As per the

Institution policy

- AMC Management: Centre has different type of annual maintenance contract with different agency. Therefore, a module should be generated with a popup reminder system with a reason time prior to the expiry of any AMC concerned dealing officials should be given an alert notice so that necessary administrative formalities for renewal can be initiated.

- **LETTER OF CREDIT (LC) – SPECIFICALLY FOR FOREIGN PURCHASES**

- LC Registration process with the Purchase Order process integration
- Track fluctuations of Exchange rate at all the stages of LC process
- Registration of LC with Issue and Expiry Date
- Request for Release of Payment as per the defined terms
- Settlement / discharge of LC
- Required reports for analysis / filing

- **PFMS / TSA / ZBSA Interface:**

- Complete seamless interfaces with the PFMS (Public Financial Management System) are essential with this proposed ERP. This integration should be seamless and extremely well controlled with very minimal manual intervention.
- This integration with the PFMS on critical processes pertaining to Treasury Single Account (TSA) for all the 'Payroll and Establishment' Financial Operations like Mapping of 'Scheme' and 'Component' Code, 'Beneficiary Code' and 'Transaction Code/s' therein.

- **Integrated Library Management:**

- Various Web 2.0 facilities like tagging, comment, social sharing and RSS feeds
- Union catalog facility
- Customizable search
- Online circulation
- Bar code printing
- Patron card creation
- Report generation
- Patron self-registration form through OPAC

- **Workshop/Overseer requisition Management:**

- Online requisition place
- Inventory management for workshop and overseer and administration
- Stocks management and alarm on stocks empty

- **Seminar Room Booking and event management:**

- Event Booking
- Seminar Room Booking
- Automatic update of event and seminar in the institute's website
- Academic Calendar management and synchronization with website
- Event management, authorization of event, report etc.

- **COMMON FEATURES ACROSS THE ERP**

- The software should run securely and reliably on server(s) provided by the institute (server specifications may be suggested by the vendor) and should have a secure database back-end provision for automated backups

- Automatic triggers and reminders for alerting users at various levels for approvals, fund allocation etc. at various stages of the purchase and accounting cycles must be built into the product. Triggers may be in the form of emails, SMS alerts etc. as per the needs of the institute.
- The software licensing model should be “UNRESTRICTED” and any number of users should be allowed to use the application without any hindrance.
- Transaction Wise Audit Trail; Version controls
- Robust built in process validation for user to execute Role based responsibilities
- Transaction Approval Status – Helps to track the transaction amongst the approving authorities with notings.
- Online approval process can also substantially reduce the usage of paper
- Effective Search Engine to track / inquire results or status
- The software must have a fully customizable, functional and aesthetically pleasing web browser based front end for users at all levels. Changes in browsers and html standards must be addressed in a timely manner by periodic updates.
- All the prevailing taxation laws (GST, Income Tax and other statutory rules) must be built into the software with periodic updates taking care of changes in the taxation laws.
- Data export or output in standard formats like PDF, MS Excel, CSV, SQL dumps etc must be possible in a manner that is amenable for integration with other software modules (if any) that the institute may be using
- Online User Manual