



thsti

ट्रान्सलेशनल स्वास्थ्य विज्ञान
एवं प्रौद्योगिकी संस्थान

TRANSLATIONAL HEALTH SCIENCE
AND TECHNOLOGY INSTITUTE

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Request for Proposal (RFP) For

**Supply, Customization, Installation, Integration, Implementation,
Testing, Training and Maintenance of ERP system at THSTI and
RCB, NCR-Biotech Cluster, Faridabad, Haryana**

(THSTI/RFP/NIT/ERP/2017-18)

20th December, 2017



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Abbreviations

AMC	Annual Maintenance Contract
AP	Account Payment
AR	Account Receipt
ATPC	Advance Technology Platform Center
BG	Bank Guarantee
BOQ	Bill of Quantity
BPR	Business Process Review
BS	Balance Sheet
CGHS	Central Government Health Scheme
CHA	Custom House Agent
CL	Casual Leave
CMC	Computer Management Corporation
CMMS	Computerized Maintenance Management system
CMS	Content Management System
COTS	Commercial off-the-shelf
CPO	Central Purchase Organisation
CPPP	Central Public Procurement portal
DA	Dearness Allowance
DG	Diesel Generator
DMS	Document Management System
EAT	Expenditure Advance & Transfer
eGeM	Government e-Market
EL	Earned Leave
EMD	Earnest Money Deposit
ESIC	Employees' State Insurance Corporation
FMS	Facility Management Service
GFR	General Financial Rules
GSLIS	Group Savings Linked in Insurance Scheme
GST	Goods and Service Tax
GSTN	Goods and Service Tax Network
HPL	Half Pay Leave
HRA	House Rent Allowance
HRM	Human Resource Management
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure
HVAC	Heating, ventilation, and air conditioning
LIC	Life Insurance Corporation
LTC	Leave Travel Concession

MIS	Management Information System
MSE	Micro and Small Enterprise
NPA	Non-performing Asset
NPS	National Pension Scheme
NPS	National Pension Scheme
OEM	Original Equipment Manufacturer
PF	Provident fund
PFMS	Public Financial Management system
PFRI	Public Funded Research Institute
PO	Purchase Order
QCBS	Quality cum Cost Based Selection
RCB	Regional Centre for Biotechnology
RD	Recurring Deposit
RFP	Request for Proposal
RFQ	Request for Quotation
RH	Restricted Holiday
SAF	Small Animal Facility
SLA	Service Level Agreement
SoW	Scope of Work
SPOCs	Single Point of Contact
SRS	Software Requirements Specification
SSO	Single Sign on
STP	Sewage Treatment Plant
TA	Travelling Allowance
TAN	Tax Deduction Account Number
TCP/IP	Transport Control Protocol/Internet Protocol
TDS	Tax Deducted at Source
THSTI	Translational Health Science and Technology Institute
TIN	Taxpayer Identification Number
UAT	User Acceptance Testing
UOM	Units of Measure
VMS	Vendor Management System
W3C	World Wide Web Consortium
WPL	Without Pay Leave

PART A: Notice Inviting Tender1.0

Tender Notice:

Online bids under Two- bid System are invited only from the bidders who were found qualified after the evaluation of the EOI (THSTI/EOI/NIT/ERP/2017-18) dated 18th May'2017 are invited on behalf of Executive Director, THSTI for award of contract pertaining Supply, Customization, Installation, Integration, Implementation, Testing, Training and Maintenance of ERP system at THSTI and RCB, NCR-Bio Science Cluster, Faridabad, Haryana. The scope of work includes Supply, Customization, Installation, Integration, Implementation, Testing, Training and Maintenance of ERP system as per the Scope of Work, functional and technical specifications, business requirements and bill of quantity (BOQ) as detailed in the later sections of this RFP.

Tender No.	:	THSTI/RFP/NIT/ERP/2017-18
Name of Work	:	Supply, Customization, Installation, Integration, Implementation, Testing, Training and Maintenance of ERP system at THSTI and RCB, NCR-Biotech Cluster, Faridabad, Haryana.
Location of supply/work	:	NCR-BSC (THSTI and RCB), Faridabad, Haryana - 121004
Sale and cost of Tender documents	:	From 20th December, 2017 The complete set of Request for Proposal (RFP) may be downloaded from our website: www.thsti.res.in or www.rcb.res.in and CPP Portal www.eprocure.gov.in or may also be collected from the Purchase Section, THSTI, Faridabad on submission of written request
Earnest Money Deposit	:	EMD of Rs 2, 00,000 /- (Rupees Two Lakhs only) is to be submitted to THSTI in a separate sealed envelope so as to reach us on or before the due date of opening

of technical bids. The EMD shall be in the form of Demand Draft, drawn in favour of "THSTI, Faridabad". EMD will be refunded to the unsuccessful bidder after award of the work.

- Notification of amendments : If the technical specification requires any modification, suitable amendment to the tender document will be issued and the same will form part of the tender document. **Corrigendum/amendments etc., if any, will be notified only on the THSTI & RCB web site/ CPP portal and no separate advertisement will be released for the same.** Prospective bidders are therefore advised to regularly visit the THSTI & RCB web site or the CPP portal for any such updates.
- Submission of Bids : The bids are required to be submitted online on the CPP portal i.e. <http://eprocure.gov.in> . Under the Two bid system the Technical bid and Price bid are required to be uploaded separately on the Portal.
- Website for Online bid Submission : <https://eprocure.gov.in>
- Date and time for pre-bid meeting : 27th December, 2017 at 14.30 hrs**
- Date of publishing the response/ clarification on pre-bid queries, if any : 03rd January, 2017**
- Last date and time for online submission of bids : 10th January, 2018 up to 14.30 hrs (BID DUE DATE)**
- Date and time of opening of tender : 10th January, 2018 at 15.00 hrs (Technical Bid Only)**
- Period for completion of work : **8 months from the date of release of Work Order**

Kindly note that only online bid will be considered against this tender. Further, requests for postponement will not be entertained. Bids send by Fax/email shall be rejected straightway. Executive Director, THSTI reserves the right to accept/ reject any or all tenders, either in part or in full, without assigning any reasons thereof.

In case of any clarification in with regard to submission of bids please contact Section Officer (S&P) (Tel: 0124-2876432). Also, the bidders are advised to read the “Guidelines to bidders on CPPP’s e-procurement module” available at the end of this tender document before submitting their bids.

Store & Purchase Officer

THSTI

PART B: Schedule of Requirements

1. Objective

THSTI and RCB management is looking to achieve following business objectives from proposed ERP:-

- 1. Internal Controls:** NCR BIOTECH CLUSTER is a lean organization and operational landscape is complex since it involves multiple projects and stakeholders. NCR BIOTECH CLUSTER management has realized that future forecast will offer more challenges with respect to variety and complexity hence manual controls over processes will offer scalability challenges. NCR BIOTECH CLUSTER management wants to improve internal controls through logical checks and balances in ERP application. This will help management fix accountability and improve operational efficiencies.
- 2. Since THSTI & RCB are two main institutions of the NCR Biotech Science Cluster the main modules of the proposed ERP software would be the same for the two institutions but would be hosted in two independent servers of the two respective Institutes for data confidentiality. Currently, the implementation of ERP is for THSTI and RCB, however there is a possibility that the same system may be extended to other sister Institutions of DBT, at different locations in India.**
- 3. Reports & MIS:** NCR BIOTECH CLUSTER manages multiple stakeholders for variety of projects and this business scenario demands ongoing reporting requirements from one or other section of management. NCR BIOTECH CLUSTER wants to switch to automated real time reports through proposed ERP. This automated approach will help management identify and address business exceptions more swiftly to improve process and meet stakeholders expectations. This will help mobilize internal resources to other value added activities like planning and analytics from existing operations. The system should be equipped with modern technologies such as Auto SMS/Email, Mobile approvals and Biometric Integration. The system should provide secure, accurate and timely information to all users at all levels for better information and decision making.

4. **Digital NCR BIOTECH CLUSTER:** NCR BIOTECH CLUSTER management wants to join and reap benefits of Digital India movement. It is intended that the system will provide automation in line with Government of India's Digital India Mission and official activities are carried out in a paperless, quick, easy and effective manner and at the same time it brings greater transparency, efficiency and accountability. It is possible for NCR BIOTECH CLUSTER to move towards digital transactions, documents, approval and reports since there is better infrastructure, acceptability, knowledge and adoption of technology within environment of our country. NCR BIOTECH CLUSTER has established infrastructure (hardware, network, adoption etc.) during past few years and is ready to move forward to next level of maturity.
5. **Process Improvement:** NCR BIOTECH CLUSTER management is also looking at ERP implementation change as an opportunity to review and identify any improvement opportunities within process based on experience gained by NCR BIOTECH CLUSTER users. NCR BIOTECH CLUSTER management team will have a chance to adopt better process practices while implementing ERP. The system should be equipped with modern technologies such as Auto SMS/Email, Mobile approvals and Biometric Integration. The system should provide secure, accurate and timely information to all users at all levels for better information and decision making.
6. **The ERP system should have perpetual licences with unlimited users.**

2. Business Requirements

The following business functions are designed to be covered under this work. The business functions under S. No. 5, 6 and 7 should be covered under the Module Head **General Administration**. Hence, the complete ERP solution should be treated as composition of 5 modules, namely:

- 1) Finance
- 2) Procurement

3) Human Resources

4) Academics

5) General Administration

The financial bid contains the same format.

S.No.	THSTI & RCB User Group	Business Processes
1	<p>Finance</p> <p>(Should be implemented with all the applicable rules, wherever required, defined in latest GFR by Ministry of Finance, Govt of India and financial/procurement rules applicable to central government organizations)</p>	<ol style="list-style-type: none"> 1. Accounting 2. Project Grants Receipt 3. Project Budgeting 4. Project Expenses 5. Foreign Currency Payments 6. Fixed Assets and Depreciation 7. Taxation configuration and statutory compliance management (Employee/ Vendors / Clients) 8. Other Expenses 9. Financial Reporting (Balance Sheet, Income and Expenditure account, Receipt and Payment Account) 10. Ad Hoc Reporting (Customer Reports / Internal reports / MIS / Utilization certificates etc.) 11. Proposed ERP application shall be compliant with proposed GST structure and all statutory compliances. 12. Reimbursement claim processing 13. Payroll Processing & Posting

		<ul style="list-style-type: none"> 14. Other receipts 15. Reports & MIS 16. Configuration/Possible Automation/Report generation to or from PFMS & EAT module.
2	<p>Procurement</p> <p>(Should be implemented with all the applicable rules, wherever required, defined in latest GFR and financial/procurement rules applicable to central government organizations as per Central Vigilance Commission guidelines.)</p>	<ul style="list-style-type: none"> 1. Equipment / Lab consumables procurement 2. Lab consumables / Lab services / Rate contracts 3. Service contracts (CHA etc.) 4. Store & Inventory process 5. Disposal of Goods (Scrap tender) 6. Indent Management System 7. eTendering Portal 8. Tender Management System 9. Vendor Management System 10. Item Management System 11. Quotation Management System 12. PO Generation 13. Item Receiving 14. Item Issue 15. Item return or transfer 16. Reports and MIS 17. Customized reporting system 18. Configuration/Possible Automation/ Report generation to or from eGEM & CPPP portals
3	<p>Human Resources</p> <p>(Should be implemented with all the applicable government rules, wherever required, as desired by</p>	<ul style="list-style-type: none"> 1. Organization Master 2. Employee Master 3. Probation/Contract/Regular 4. Online/Offline Recruitment

	<p>stakeholders)</p>	<ol style="list-style-type: none"> 5. Joining 6. Employee Self System (Includes performance appraisal system) 7. Termination 8. Taxation configuration and statutory compliance management 9. Ad Hoc Payment 10. Increment 11. Payroll Management System 12. Attendance Management System 13. Tour Management System 14. Service Book 15. Full and Final Settlement 16. Reports and MIS
<p>4</p>	<p>Academics</p> <p>Should be implemented with all the applicable rules, wherever required, defined by UGC or MHRD.</p>	<ol style="list-style-type: none"> 1. Vacancy Advertisement 2. Website 3. News paper 4. Courses - PhD/ MSc-PhD/ any other new course 5. Admission Form 6. Prospectus Sale 7. Application fees 8. Information 9. Screening & Selection 10. Exam 11. Eligibility 12. Results 13. Student Admission 14. Student Master Data (Domestic / International Students), including Alumini network 15. ID Card 16. Batch, Course and Subject

		<ol style="list-style-type: none"> 17. Hostels/ details 18. Learning Management: Lectures/Classes 19. Library Management System (To be integrated with the existing LibSys application) 20. Faculty Management System 21. Class Room Learning, lecture and timetable management 22. Social Learning 23. Events/Seminars/Training/Workshops Management System 24. Experiment/Lab management system 25. Exams & Grading 26. MCQ/ Description / etc. 27. Semester / Final Exams 28. Grade Preparation / Approval / Transcript 29. Semester Grades/ Cumulative grade sheets
5	Facility Management	<ol style="list-style-type: none"> 1. Central/Common Services <ol style="list-style-type: none"> a. Security Services b. Housekeeping Services c. Garbage Disposal d. Solid waste management e. Pest Control f. Horticulture 2. Transport Services <ol style="list-style-type: none"> a. Large Vehicles b. Small Vehicles 3. Campus Facilities <ol style="list-style-type: none"> a. Guest House b. SAF (Small Animal Facility) c. ATPC d. Students Hostel

		<ul style="list-style-type: none"> e. Auditorium f. Cafeteria <ul style="list-style-type: none"> 4. Front office management system 5. MIS & REPORTING (Can be different for THSTI and RCB)
6	<p>Engineering Services (Electrical & Allied, Civil & IT services)</p> <p>(Should be implemented with all the applicable rules, wherever required, defined in CPWD manual, latest GFR and financial/procurement rules applicable to central government organizations)</p>	<ul style="list-style-type: none"> 1. New Projects 2. Repair Works 3. Consumables Replacement 4. CMMS 5. Maintenance Services <ul style="list-style-type: none"> a. AMC Contracts b. CMC Contracts c. Other Contracts
7	<p>Other Modules (To be used as a standalone and would be integrated with other modules))</p>	<ul style="list-style-type: none"> 1. File Tracking System 2. Document Mangement System 3. Online Payment Gateway 4. Approval Management 5. Committee Management System 6. SMS/Email Gateway Integration

Data Migration and External Integration

<p>Data Migration (Existing Applications/Data Base) and External Integration</p>	<ul style="list-style-type: none"> 1. Library Management Application (Lib Sys) 2. Tally ERP 9 (with SQL DB) 3. Webtel E TDS (with SQL DB) 4. E Payroll (with MS Access DB) 5. Complain Portal (Php & Mysql) 6. Dispatch Mangement System (Php & Mysql) 7. e-THSTI modules of THSTI (MySql DB)
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	<ul style="list-style-type: none"> a. Leave Request b. Employee Details c. Leave Balance Credit System d. Reimbursement/ Claim Management System e. LTC Request f. Tour Request g. Hospital List h. Complaint Booking i. Inventory Management System j. Online Indent system k. Vendor Registration l. Project Management system m. Room Booking System n. Visitor Management System <ul style="list-style-type: none"> 8. Leave Management System (RCB) 9. Ticket Management System 10. Dak Management System 11. Biometric Attendance Management system (with SQL db) (External Integration, would not be migrated) 12. Various data in Excel format
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Details of above processes are mentioned under PART G: Scope of Work (SoW) of this document.

THSTI & RCB does expect all internal approvals and reviews to be mapped in proposed ERP and maintain digital traces of such transactions (approvals, decisions) and documents through proposed ERP. THSTI & RCB being a central government associated body, does follow rules and processes laid down by government.

PART C: Bidder/ OEM Eligibility criteria

The eligibility criteria for this RFP document remain same as defined in the published EOI THSTI/NIT/EOI/ERP/2017-18 dated 18th May 2017. Bidder shall explicitly notify THSTI in case if there is any deviation in the company profile, offered ERP Solution or any other details submitted in the forms against the EOI.

PART D: Instruction to Bidders

1.0 Special Instructions:

1. The Bidder shall carefully examine and understand the specifications/conditions of the RFP document and if required seek clarifications in writing during to ensure that they have understood all specifications/conditions of the tender document. If no such clarifications are sought in writing, it will be taken that the Bidder has read, understood and accepted all the terms, conditions and specifications in the RFP document.
2. The OEM/ Bidder should give an undertaking that service & support will be provided for at least 5 years, after the end of specified warranty and AMC period on separate commercial terms.
3. The Bidder is required to quote for the complete BOQ. Partial quotes are liable to be rejected.
4. Detailed process blue print/ process flow of the offered system should be attached in the technical bid. The project execution plan with the required execution time of each milestone in the Technical Bid format, *Attachment 6 (PART H)*, should be attached with the technical bid. Also a detailed detailed project schedule with timelines and resource allocation table is to be submitted as *Attachment 3 (PART H)*
5. The Bidder is required to upload a copy of this tender document, with all pages signed by the authorized person, to confirm that Bidder has read and understood the conditions of this tender document and that the proposal is submitted in full understanding and agreement of the requirements of THSTI & RCB.

6. The Bidder are advised to visit the site with prior appointment and gather the necessary knowledge about procedures & work flows as are necessary before submitting its bids. All costs associated with such site visit and in preparation and submission of the Bid will have to be bear by the bidder. THSTI & RCB will in no case be responsible for such costs, regardless of the conduct or outcome of the bidding process.
7. The complete bid shall be without alteration or erasures, except those to accord with instructions issued by the THSTI & RCB or as necessary to correct errors made by the bidder, in which case such corrections shall be initialled by the person or persons signing the bid.
8. The bidder shall submit only one option, which is best suitable to meet THSTI & RCB requirements. The bids submitted with more options shall be liable to be rejected.
9. The Bid prepared by the Bidder, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and THSTI & RCB, shall be in English only.
10. Wherever a specific form is prescribed in the Bid document, the Bidder shall use the form to provide relevant information. If the form does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the said information. For all other cases, the Bidder shall design a form to hold the required information.
11. The Bidder shall explicitly indicate the non-compliance or deviation of the Solution offered in the Proposal to all the terms, clauses, conditions and specifications stipulated in this RFP. If non-compliance or deviation for any term, clause, condition or specification is not explicitly indicated, it will be construed as compliance and if successful in the bid, the bidder is obligated to comply with all the requirements (excluding those non compliances explicitly accepted by THSTI & RCB in writing). The details are to be attached as *Attachment 2 (PART H)*
12. Successful bidder shall perform all the obligations specified in accordance with the terms and conditions laid down in the RFP. All details provided by the Bidder should be specific to the requirements specified in this RFP. Detailed clarification may be provided by Bidder, if so desired by THSTI & RCB. The Bidder shall specify the responsibilities of THSTI & RCB, if any, separately for the successful implementation of the project.

13. The format of technical bid (including organizational capability) and price bid are given in 'Part-H' and 'Part-I' respectively. Bidder should ensure that all documents are uploaded with the Technical bid and Price bid as per the checklist given at Annexure- I.
14. The bidder may quote the items, which meets the requirements and specification. In such case, the bidder shall provide the details of items quoted along with the bid, if available.
15. Bidder shall contact the tenderer for any clarification regarding the technical requirement.
16. The bidder should inform acceptance of Purchase Order within three days of receiving the order.

2.0 General Instructions:

1. Quotation/Tender should be uploaded on or before the bid due date stated in the NIT. Quotations/Tenders received after the bid due date will not be considered.
2. Quotation should clearly specify delivery schedule.
3. When quotation is in foreign currency, agency commission payable, if any, should be shown separately in Indian rupees.
4. Any taxes or statutory levies payable should be shown separately; otherwise quoted price will be treated as all inclusive.
5. Any deviation from THSTI & RCB's specification of items shall be clearly indicated in quotation itself.
6. Items offered should be as per requirements mentioned in the *Scope of work (Part-G)* and *Business Requirements (Section 2 of PART B)* which are further detailed under *PART F: BoQ and Process Specification* section.

PART E: General and Special Tender Conditions

1. Period of validity:

The tender shall remain valid for acceptance for a period of 90(ninety) days from the bid due date.

2. Bidding Format:

a. The bidder should submit its bid in the Technical and Financial bid format as provided in Part 'H' and Part 'I' of this tender document. All the enclosures are required to be attached with the bids as per the sequence mentioned therein.

b. Split-up part numbers of each item of the BOQ is to be shown in the financial bid with line item cost.

3. Award of Contract:

The contract will be awarded to the bidder whose bid has been determined to be eligible and to be substantially responsive to the bid documents and who has offered the lowest evaluated bid. The bid evaluation criteria is defined and described in *Part H*.

4. Performance Security :

a. Within 15 days of receipt of the Work Order from the THSTI, the successful Bidder shall furnish to THSTI a security in the form of a Bank Guarantee from Nationalised/Scheduled bank for an amount of 10 percent of the Contract sum as per format prescribed at *Annexure-II*.

b. The validity of the Performance Security as per the Notification of Award for work shall be up to the end of the Warranty period with 3 months claim period after expiry of warranty period.

c. Failure of the successful Bidder to lodge the required Bank Guarantee shall constitute sufficient grounds for the annulment of the Award and forfeiture of the Bid Security, in which event the THSTI & RCB may make the Award to the next lowest evaluated Bidder or, if there are no other Bidders, call for new Bids.

5. Supply and Installation Terms:

a. The Bidder shall provide the details & technical specifications of the quoted components

and system along with the bid.

- b. The required delivery schedule must be mentioned against each item.
- c. The successful bidder should supply items as per the quantity listed in the BOQs.
- d. Supply & Installation is at THSTI & RCB, NCR-BSC, Faridabad.

6. Project Duration- 8 Months:

- a. The entire work including Supply, Customization, Installation, Integration, Implementation, Testing and Training should be completed within **8 months** of releasing the work order. The maintenance part mentioned in the RFP starts from the beginning of warranty period and continues during the AMC period.
- b. The entire documentation and testing reports should be submitted within the project duration.
- c. Training to the identified group of users in THSTI & RCB also to be provided within the project duration.
- d. Final acceptance certificate will be issued by THSTI & RCB only after completing point a, b & c mentioned above.

7. Final Acceptance Certificate:

- a. On successful completion of the work as per the 'Scope of work' specified under Part 'G' of this RFP document, the bidder shall submit its application to THSTI & RCB for issue of 'Final Acceptance Certificate' for the work carried under this contract.
- b. The complete work shall be subject to inspection by the technical committee consisting of expert members.
- c. On successful testing of the system, the bidders will be issued the 'Final Acceptance Certificate'. In case any deficiencies are noticed during the inspection, the bidder will be liable to make good the deficiency failing which the 'Final Acceptance Certificate' will not be issued.

- d. The bidder will be entitled to submit its last milestone bill for payment (as defined in following *clause 9 Payment Terms*), only when “Final Acceptance Certificate” is issued by THSTI & RCB.
 - e. Three (3) year of Warranty period would start after the “Final Acceptance Certificate” issued by THSTI & RCB.
 - f. After completion of Warranty Period AMC (Annual Maintenance Contract) period would start, Contract Period would be for minimum 2 years. The details and Scope of Warrantee and AMC are defined in PART G of this document.
8. **Taxes: GST as per applicability.**
9. **Payment Terms:**
- a. Quantities mentioned under *Business Requirements (Section 2 of PART B)* which are further detailed under *PART F: BoQ and Process Specification* are approximate only. So the successful bidder should supply items listed in this section as and when required during the execution of the work. The payment will be made only for actual/supply installed/ utilized quantities & labour at the site
 - b. The bidder shall pay all taxes, duties, levies, work contract tax etc. of the Government provisions of the Income tax Act or as per the advice of the Income Tax Authority. Deduction of Income tax/ Works Contract tax/ other taxes shall be made from payment as per the relevant provisions of the Income tax Act or as per the advice of the Income tax Authority/ other Competent Authority.
 - c. Payment to the bidder would be subject to following Milestone. Last Milestone bill can be raised by bidder only after ‘Final Acceptance Certificate’ issued by THSTI as per clause 7.0 above.

Proposed Payment Terms –

Milestone	Key Activity	Deliverable Linked to Milestone	Payment (Amount as Payment Percentage of Lump Sum Contract Value %)
M1	Submission & Acceptance of Business Process Review (BPR) Document & Project Plan for the Complete Scope of work	BPR & ERP Project Plan Duly Accepted by THSTI-RCB	15%
M2	Installation of ERP Software with Delivery of Associated Licences	Software Delivery Document Duly Accepted BY THSTI/RCB	20%
M3	ERP implementation and UAT (user Acceptance Testing) completion to move to Live Site (All modules)	UAT Sign-off on the Integration of ALL Modules	35%
M4	Project Completion- Final Acceptance Certificate	"Final Acceptance Certificate"	30%

10. Liquidated Damages for Delay

If the bidder fails to complete the execution of works or any section by the time for completion, within the relevant time prescribed by Clause 5.0, then the bidder shall pay to THSTI liquidated damages at the rate of the 0.5 % of contract value for per week of delay or part thereof subject to maximum of 5% of the contract value. The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due or to become due to the Bidder. The payment or deduction of such damages shall not relieve the Bidder from his obligation to complete the Works, or from any other of his obligations and liabilities under the contract.

11. Intellectual Property :

Ownership of all data (master, transactional and other) collected through the ERP will be wholly owned by THSTI & RCB. The service provider will have to maintain confidentiality and safeguards while handling the data and other proprietary information/ materials of THSTI & RCB. Any Intellectual Property Rights owned by the service provider, prior to the execution date and or applied for prior to the execution date shall strictly be owned by the service provider. Any Intellectual property rights owned by THTSI, prior to the execution date or applied for prior to the execution date shall strictly owned by the THSTI & RCB. Any IPR generated during or after the execution of the ERP implementation will be owned by THSTI & RCB.

For commercial off the shelf products, service provider or any other service provider should clearly state the ownership of such intellectual property. In such cases, service provider shall seek permission from THTSI using those products and shall ensure that the usage of those products confirms to the licensing terms between THTSI and service provider. If the IPR is owned by a third party then it is the responsibility of service provider to enter into proper agreement with the owner of intellectual property for using the requisite component in the ERP.

12. Warranty Clause:

- a. All devices, software's, modules, including the items optionally quoted, if supplied, should have comprehensive onsite warranty for three years from the date of commissioning of the work.
- b. **During the first six months of warranty period, the bidder will have to depute at least two engineers for troubleshooting, service support and site coordination. The engineer so deputed will have to remain necessarily at site during the working hours of THSTI & RCB and will be responsible for smooth functioning of the Client & server software. The bidder has to comply with the existing labour laws as amended from time to time.**
- c. All ongoing software upgrades for all major and minor releases should be provided

during the warranty & AMC period. The bidder should not charge any extra cost for such upgrades and bug fixes.

d. Bidder should ensure that there is a back-to-back agreement with OEM to meet above hardware and software warranty terms.

e. Bidder should ensure service and maintenance support for at least 7 years, after the specified warranty period on separate commercial terms.

13. Price Variation Clause:

The rates quoted by the bidder shall be firm throughout the contract period and there shall be no upward revision of the rates quoted by the bidder for any reason what so ever.

14. Liability / Accident:

The bidder shall indemnify and keep indemnified THSTI & RCB against all losses and claims for injuries and damages to any person or property whatsoever which may arise out of or in consequence of the construction or maintenance of the work and against all claims, demands, proceedings, damages, costs, changes , expenses whatsoever in respect thereof in relation thereto.

15. Extra Item:

Any unforeseen item of work/supply / extra item of work as being authorised by the Centre and not included in the contract, shall be done by the Bidder at mutually agreed rates. Written prior approval of THSTI & RCB should be obtained before undertaking any extra work. Payment of such items shall be made at actual supported by necessary documentary evidence duly approved.

16. Termination:

Notwithstanding anything elsewhere provided herein and in addition to any other right or remedy available to THSTI & RCB under the contract or otherwise including right of THSTI & RCB to claim compensation for delay, the THSTI & RCB may, without prejudice to his right against Bidder in respect of any delay, bad workmanship or otherwise or to any claims for damage in respect of any

breaches of the contract and without prejudice to any rights or remedies under any of the provisions of this contract or otherwise and whether the date for completion has or has not elapsed by intimation in writing, absolutely determine the Contract.

Default or failure by the bidder in any of the under mentioned cases, including but not limited to the following shall be the basis of taking action under this clause of the contract:

- a. Failure to provide at the job site, sufficient labor, material, equipment, machinery, and / or facilities, required for the proper and / or due execution of the work or any part thereof:
- b. Failure to execute the works or any of them in accordance with the contract.
- c. Disobedience of any order or instruction of the Site Engineer and / or Engineer-in-charge.
- d. Negligence in carrying out the work or carrying out of work found to be unsatisfactory by the Engineer-in-charge/THSTI & RCB.
- e. Abandonment of the works or any part thereof.
- f. Failure to execute the Contract in terms of the form of Contract forming part of the tender documents within Ten days of notice in this behalf from THSTI & RCB.
- g. If the Bidder is incapable of carrying out the work.
- h. If the Bidder misconduct in any manner.
- i. If there is any change in the constitution of the Bidder (if a firm) or in the circumstances or organization of the Bidder, which is detrimental to the interests of THSTI & RCB.
- j. Dissolution of the Bidder (If a firm or commencement of liquidation) or winding up (whether voluntary or compulsory) of the Bidder (if a company or appointment of a receiver or Manager of any of the Bidder's assets and / or insolvency or the Bidder (if a sole proprietorship) or of any partner of the Bidder (if a firm).
- k. Delay in execution of work, which in opinion of THSTI & RCB shall delay the completion of work beyond the stipulated date of completion.
- l. Distress, execution, or other legal process being levied on or upon any of the Bidders goods and /or assets.
- m. Death of Bidder (if an individual)

- n. If the Bidder of any person employed by him shall make or offer for any purpose connected with the contract any gift, gratuity, royalty, commission, gratification or other inducement (whether money or in any other form) to any employee or agent to THSTI & RCB.

The decision of the Executive Director, THSTI as to whether any of the events/ contingencies mentioned in aforesaid clauses entitling THSTI to terminate the contract has occurred shall be final and binding upon the Bidder. The reason for the termination stated in the notice of termination shall be final and binding upon the Bidder and shall be non-arbitral. The jobs left however by the Bidder shall be got done at his risk and cost through the other agencies and the Contract shall be determined accordingly.

17. Force majeure:

The right of the bidder to proceed with the work shall not be terminated because of any delay in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the bidder, including but not limited to acts of god, or of the public enemy, restraints of a sovereign state, floods, unusual severe weather conditions.

18. Arbitration:

Any claim, dispute or difference arising out of or in connection with this agreement and which cannot be settled by mutual consultations, shall be referred to sole Arbitration or an Arbitrator to be appointed by mutual consultations. The award of the Arbitrator shall be final and binding between the parties as per the terms and conditions of the Agreement to be executed on award of contract. The Arbitration proceeding shall be governed by the Arbitration and Conciliation Ordinance dated 26th March, 1996 and shall be conducted in Haryana.

19. Jurisdiction of Dispute:

All disputes under this contract shall be subject to the jurisdiction of Haryana high court.

20. Terms not expressly provided for:

In case this tender document does not contain a provision or terms for dealing with a situation they may arise during the execution of the works, the decision made by the Executive Director THSTI will be treated final and will be abiding on the bidder.

PART F: BOQ and Process Specification

THSTI & RCB management is planning to automate following process areas and develop their website through proposed ERP.



Figure 1 Process Landscape: THSTI & RCB ERP

THSTI & RCB have outlined process for bidder's reference however detailed process blue print will be prepared after detailed requirement discussion with bidder. This approach is adopted to provide a fair play for all bidders and ERP products.

About the Institutes

A. Translational Health Science and Technology Institute (THSTI)

THSTI is a research institute and its main activity is to conduct research in the area of public health. THSTI operations can be divided into following three activities based on respective area:-

- Core THSTI
- Centres
- Projects

THSTI receives grant from government bodies and other funding resources for conducting research. Grant may be received in any currency by THSTI and due statutory dues are paid to respective authorities.

Following are some of prominent funding agencies for THSTI:-

Niche Centres

- Vaccine & Infectious Disease Research Center (VIDRC)
- Paediatric Biology Center (PBC)
- Center for Bio-design & Diagnostics (CBD)
- Policy Center for Biomedical Research (PCBR)
- Drug Discovery Research Center (DDRC)
- Center for Human Microbial Ecology (CHME)

Extramural Centres

- Clinical Development Services Agency (CDSA)

Fellowships

- JRF/SRF

International Projects

- International Projects (W.H.O, Wellcome Trust etc.)



DBT/DST/UGC/ICMR/CSIR

B. RCB (Regional Centre for Biotechnology)

RCB (Regional Centre for Biotechnology) is established by the Department of Biotechnology, Government of India under the auspices of UNESCO and incorporated by an Act of Parliament as an autonomous institution of education, training and research of National Importance.

RCB is part of the Biotech Science Cluster (BSC) and operates in synergy with THSTI and the other institutions coming up in the Cluster.

RCB operations can be divided into following three categories based on respective activities:

- Core RCB
- Centres
- Projects

RCB receives grant from government bodies and other funding resources for conducting research. Grant may be received in any currency by RCB and due statutory fees are paid to respective authorities.

RCB also controls the following Niche centres/projects:

- i. Advance Technology Platform Centre (ATPC)*
- ii. NCR Biotechnology Business Incubator*
- iii. Technology Advancement Unit(TAU)*
- iv. Bio Safety Support Unit(BSU)*

RCB also has International and National Networking projects such as

- i. RCB Dailab*
- ii. BM14 Project*

Website Features

The portal will be developed based on the following design features:

- ✓ A fully responsive website shall be developed / upgraded/integrated with the existing and hosted at THSTI & RCB / or THSTI &RCB approved service provider.
- ✓ The website shall have a multi browser compatibility such as it will open in all major browsers like Google chrome, Firefox, Internet Explorer, Opera etc. and across screen sizes (1920X1080,1024X768,960X720 etc.)
- ✓ Header and footer of website shall indicate proper reference to THSTI/RCB.

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- ✓ The web portal should have a zero footprint on the client side.
- ✓ Latest and modern open source web-technologies (to make portal for any type of device) shall be used for responsive design
- ✓ Interactive features will be used to make the web portal attractive for all stakeholders
- ✓ Design shall be neutral to make the portal available on all devices and platforms especially on mobile devices (using mobile web-interface and/or an app interface) Web portal shall be designed so as to take advantage offered by popular social media
- ✓ The portal should have a dedicated notification link which will be available on all the tabs for news and current news.
- ✓ A separate link should be provided on all pages in navigation menu in the site that shall always display a top navigation area with the functions: Home/ THSTI / ABOUT US/ RESEARCH / INNOVATION/ PEOPLE/ACADEMICS/ CAREERS/ NOTIFICATIONS/ CONTACT US
- ✓ Also there should be other information available on the menu which may be regarding tender/ THSTI team / Notice / Citizen Charter / RTI Matter etc. to be finalized and indicated through SRS for website.
- ✓ To manage different type of information in the portal, it must be integrated with ERP for innovation, people and other sections, also website shall be compatible content management system.
- ✓ The website shall have a gallery section for displaying picture of recent events and functions.
- ✓ Website shall meet all existing features of existing website of THSTI (<http://www.thsti.res.in/>) and RCB (<http://www.rcb.res.in/>)

RCB website enables **external users** to obtain information on the following key features:

- The Centre (RCB)
- Academic Information – Study programme, research focus, related activities
- Seeking Admission to the Centre

- Faculty
- Research
- Services – facilities, student services, academic services, administration
- Linkages – Industries, Global linkages, industry associations/ bodies.
- Job opportunities – research career, teaching careers etc. – *proposed*
- News & Events
- Extracurricular activities
- Alumnus - *proposed*
- Other Statutory information

The internal users include – faculty, staff and students, who can have access to:

- Calendar of events
- Exam Results
- Research Articles & information
- Faculty Home page
- Circulars, Notification
- Any other statutory information for disclosure
- Learning platforms such as Moodle - *proposed*

Design and Layout

The website has an elegant design and a user-friendly, easy-to-navigate layout, an ideal design layout of that of an education friendly resource site. The website/ portal is based on International standards such as W3C and supports Web 2.0 based tools and CMS like Drupal an open source content-management framework.

a. Site Map

The site map for the RCB website is as under:

- The RCB
- Academic
- Research
- Faculty
- Admissions
- Research Collaborations
- Governance
- Publications
- Facilities
- Campus Life / Student Life
- News & Events
- Downloads

b. Intranet

- Student Intranet

Moodle - proposed

Circular & Notifications

Extracurricular activities

Seminars & events

- Faculty Intranet

Moodle - proposed

Circular & Notifications

c. Administration Module

Leave Applications

Tour – Visits/ Seminars

Terms of Use & Disclaimer

Webmaster – post a query, contact official in RCB

External Links

RCB: Face book, Twitter, Linked in, Google Plus, YouTube etc.

d. Online Applications (Recruitment and Admissions)

- JRF/PhD Programmes
- Research Career Award
- Project Positions
- Faculty Positions
- Administrative and Technical positions

e. Payment Gateway

- Application fees
- Hostel fees - *proposed*
- Mess bills - *proposed*

Finance Processes

THSTI & RCB team manages finance operations and services through Tally application under current scenario. Finance team is a key to THSTI/RCB research operations for reporting purpose and sustaining routine operations. This becomes more important since THSTI/RCB is dependent on external sources of

fund for sustaining routine operations and there is very little revenue generation operations carried out by THSTI/RCB. Following are general transaction reporting rules at THSTI & RCB:-

THSTI & RCB Accounting:

THSTI & RCB finance team will report financials on two logics –

- a. **Main Accounting:** All financial transactions related to THSTI/RCB Core grant will fall under this category. THSTI/RCB team can share details of existing finance application for more understanding of main accounting.
- b. **Project Accounting:** Remaining financial transaction (income or expense) is recorded through a project –sponsor based approach at THSTI/RCB. One project can have more than one sanction order. There can be projects related to research or some internal / admin work at THSTI/RCB. Project accounting shall involve capturing of various master data like project owner, objective of project, Granting authority, and sanction orders, There will be some exceptions to this rule where project level details will not be recorded so this flexibility shall be allowed by proposed ERP e.g. recording fee income from students etc.

Finance Reports & Transactions

Annual financial statement (balance sheet, income & expenditure account, receipt & payment account, statement of expenditure and utilization certificate) is prepared by merging of above both types.

Following are key vouchers posted by THSTI/RCB team: *Journal Voucher, Bank Payment Voucher, Cash Payment Voucher, Cash Receipt Voucher, Bank Receipt Voucher, Contra Voucher, Memorandum Voucher, Reverse entries,*

Bank reconciliations shall be completed in proposed ERP through Bank statement upload by THSTI/RCB team.

Project-sponsor based approach is followed at THSTI/RCB to maintain financial discipline at organization and track budget level reporting at THSTI/RCB. It is expected that proposed ERP shall provide reports on a particular project and provide management view of all running projects w.r.t. financial performance through a dashboard.

Project Grants Receipt:

This process is detailed under following project level details.

Receipts: THSTI/RCB will receive different type of receipts through CASH / BANK/ Cheques / DD / NEFT / RTGS and other modes of financial transactions. Following are some of key receipts:

Fee Receipt refers to fee received from direct students or any other type of students of THSTI. This receipt is a bank receipt voucher by THSTI/RCB from a student. It is optional to record project details for Fee receipt transaction.

EMD / BG/ Tender Fee / Security Deposits: These are refunded as per different business rules.

Project Budgeting:

This process is further detailed under current methods section. Project budgeting involves tracking budget at project level for reporting to sponsor/ THSTI & RCB Management. Flexibility required to rebook expense booked under different budget code & project code at a later date. Report format is annexed under references section.

Project Expenses:

Majority of expenses are recorded against a particular project, hence proposed ERP shall support recording project details, refer project budget balance and other project details like sanction order etc. Finance team expects controlling of expense booking at the time of issuing order in case budget is exhausted. There can be a provision to choose another sanction order/ seek management approval for such exceptions. This process is further detailed under following project lifecycle.

Foreign Currency Payments:

THSTI/RCB finance team transacts in multiple currencies and ERP shall allow posting of transactions in multiple currencies. Proposed ERP shall print bank templates as per annexure, Banks may change their format or THSTI/RCB can start operations with a new bank as per business need, ERP shall be flexible to accommodate this need.

Fixed Assets and Depreciation:

THSTI/RCB maintains a fixed assets register for all fixed assets and depreciation is booked against each asset. Proposed ERP shall allow creating and tracking of assets, along with asset owner and period of ownership. Ownership can be transferred from one owner to another owner during asset lifecycle and an associate is supposed to handover all assets to THSTI/RCB (new owner) at the time of leaving organization. Proposed ERP shall allow booking depreciation as per statutory rules and allow flexibility to THSTI/RCB finance team.

Taxation configuration and statutory compliance management (Employee/ Vendors / Clients):

THSTI/RCB does follow all statutory compliances w.r.t. TAX and return filling under current scenario. THSTI/RCB expects following business transactions from proposed ERP:-

- Collection / Levying of all applicable taxes as per statutory guidelines
- Filing of returns for different taxes as per statutory guidelines
- Ad hoc reporting for reconciliations/ calculation of THSTI/RCB liabilities
- Tax rules & tax nomenclature should be user defined so that new tax structure as proposed GST system may be defined in the system. System should be compliant with proposed indirect tax regime i.e. Good & Services Tax

Other Expenses

There might be some expenses where All expenses are recorded against a particular project, hence proposed ERP shall support recording project details, refer project budget balance and other project details like sanction order etc. Finance team expects controlling of expense booking at the time of issuing order in case budget is exhausted. There can be a provision to choose another sanction order/ seek management approval for such exceptions. This process is further detailed under following project lifecycle.

Other Receipts

Financial Reporting (Balance Sheet, Income and Expenditure account, Receipt and Payment Account):

This reports format can be referred under references section.

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- Balance Sheet
- Income & Expenditure Account
- Receipt & payment Account (Core as well as projects)
- Utilization certificates (Core as well as projects)
- Statements of Expenditures (Core as well as projects)
- Assets Acquired Certificate (Core as well as projects)
- Manpower Certificate (Core as well as projects)
- Grant Claim Bill (Academics)
- Flexible Chart of Accounts with multilevel ledger codes, user defined flexible numeric or alpha numeric codification system, with cost centre accounting and employee wise accounting wherever required,
- Ad Hoc Reporting (Customer Reports / Internal reports / MIS / Utilization certificates etc.)

This reports format can be referred under references section.

Reimbursement claim processing:

Submission, approval and disbursement of reimbursement claims for following types:-

- Traveling reimbursements (TA / DA)
- Medical Reimbursements
- Children Education / Tuition fees
- Local Conveyance
- Telephone / News Paper / Mobile Phone
- Leave travel concession (LTC)
- Employee annual reimbursements detail

Some of above claims carry tax implications / statutory limits, THSTI/RCB expects that all such controls shall be addressed by proposed ERP application.

Payroll Processing & Posting:

Employee Master will be created and maintained by HR Department. Employee details include monthly payroll processing based on Biometric / smart card / ad hoc attendance will be monitored by Finance department. Monthly Payroll will be processed, verified and posted by Finance team. Regular monthly deductions like license fee, water, electricity charges, HRA for providing accommodation. Electricity meter / water consumption details will be uploaded by Engineering / Finance department at employee level.

Following reports will be expected from Payroll module:-

- Report on all pay master components (Monthly/ Quarterly/ Annual) for Employees (Regular/ Contract/Consultant)
- Report on all paid salaries for
- Employee types (regular/contract),
- Project,
- Department,
- Centres or any combination of time period in history (up to last ten years)

Monthly report generation for NPS, GSLIS, CGHS, TDS and other components

Employee (regular/ contract/consultant) tax deductions, computation / calculation / projection and other reports for a financial year (monthly /quarterly detailed)

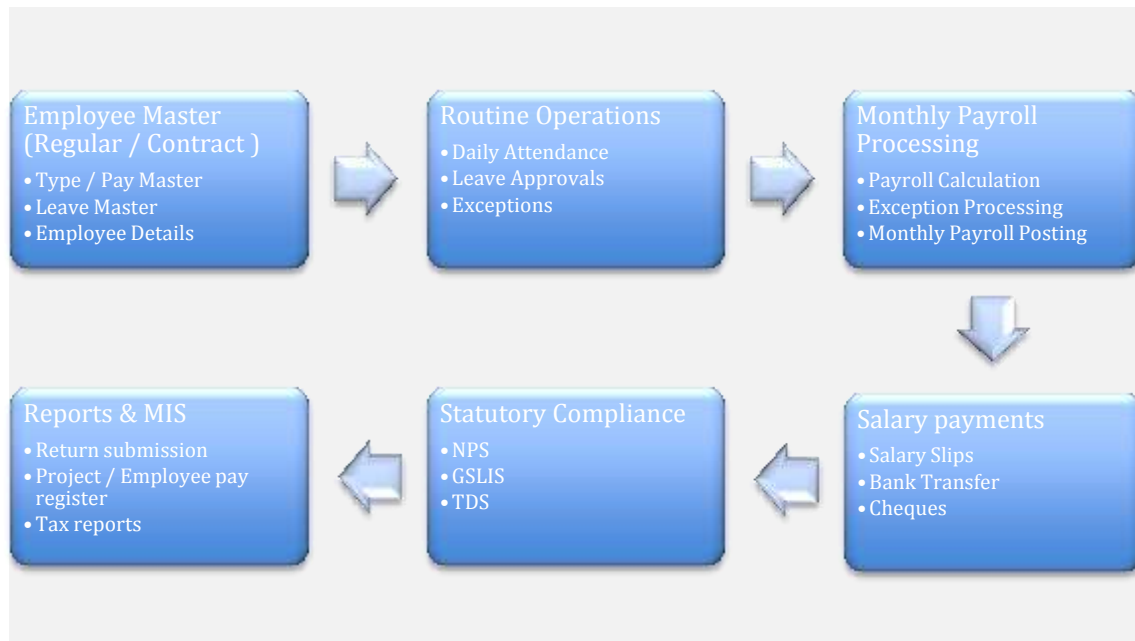


Figure 2 Regular Employee Transactions

Each project is a sub unit of finance operations for income and expenses at THSTI/RCB. Finance team will need project as a central unit for all financial transactions including payroll. This requirement shall be kept in consideration for designing a good solution for THSTI/RCB finance operations. Sometimes a project may get transferred to THSTI from external organization during study.

Following cycle represents typical project finance process followed by THSTI/RCB:-

Project Master: Project is an important dimension of work at THSTI/RCB. THSTI/RCB team has shared that all research work is classified under a project. A project can initiate through following means:-

- Requirement from a sponsor
- THSTI/RCB can initiate a project and find a sponsor
- Transfer of a running project from other locations
- Ad hoc services for running big project outside THSTI/RCB

A project can have multiple status depending on life cycle of project, following are some of proposed status for a project:-

- **Draft:** This status corresponds to a project under conception by authorized users.
- **Review:** This status corresponds to a project under internal review / sponsor review for freezing of scope and other finer details of project.
- **In Progress:** This status represents a project in progress but running on time as per schedule agreed with sponsors.
- **Closed:** This status refers to a project completed and closed by THSTI with sponsors.

A project shall have following information elements for definition purposes:-

Project Details: Project details include scope of work, project deliverables, project timelines, project sponsor/s, project finance requirements, project team (principal investigator/s, research team etc.), project type, project category for recording and tracking of project and other remarks options. This information requirement can change based on need of THSTI/RCB. A project will be logged in proposed application by authorized users and approved by management users.

Project Identifiers: Project identifiers include project specific information like project ID, Sponsor file details, project categorization and any other unique information tags to identify project and report project data.

Project Budget: Project budget refers to project finance requirements in different expense heads identified by THSTI team, for a specialized project there might be some special heads of expenses and proposed ERP shall help in defining budget for particular expense types (recurring / Non -recurring / equipment/ manpower etc.) . This budget is approved and can be amended by defined hierarchy of THSTI/RCB. A project budget can be submitted to sponsor along project brief and proposed ERP shall provision a budget print for this purpose.

Sanction Order: Sanction order refers to grants sanctioned by a project sponsor for a particular project. There is one to one relationship between project and sanction order. Normally a sanction order contains information about project identifiers like file reference etc. A sanction order provides detailed information about amount sanctioned and purpose of grants. THSTI/RCB finance team expects ERP to ensure compliance w.r.t. defining sanction order expense heads and procured goods. Following are some of key expense types defined under sanction order.

Equipment: This head contains information about equipment name, equipment quantity, and equipment rate. Under no circumstances a user shall be able to indent for quantity more than specifications in sanction order. There is a possibility of procuring equipment with a lesser rate/ quantity and this balance shall be returned to sponsor at the end of project. Proposed ERP shall allow user to input a commercial name and sanction order name for equipment to address any gaps.

Furniture & Fixtures: All furniture & fixtures related grants are covered under F&F head.

Manpower: This head contains information about designation, monthly rate (upper limit of monthly rate) and duration of engagement for monitoring manpower cost of project.

Consumables: This head contains information about amount reserved for consumables expenses.

Contingency: This is emergency fund available to THSTI/RCB project team for managing project. This amount is not allowed to be set off for any of expenses mentioned in sanction order (Equipment, Manpower, Travel, Medical care etc.) on case to case basis.

Travel: This amount can be divided among mode of transport (road, rail etc.) based on project requirements. A tour order is required for any air travels by project team for research work.

Medical Care: THSTI/RCB projects are focused on medical health issues and there is a specific focus on health of project team. Some projects have specific allocation for medical care of research team and this fund shall be used for medical welfare of associated team.

There can be other types also based on business requirement and ERP shall support amendments.

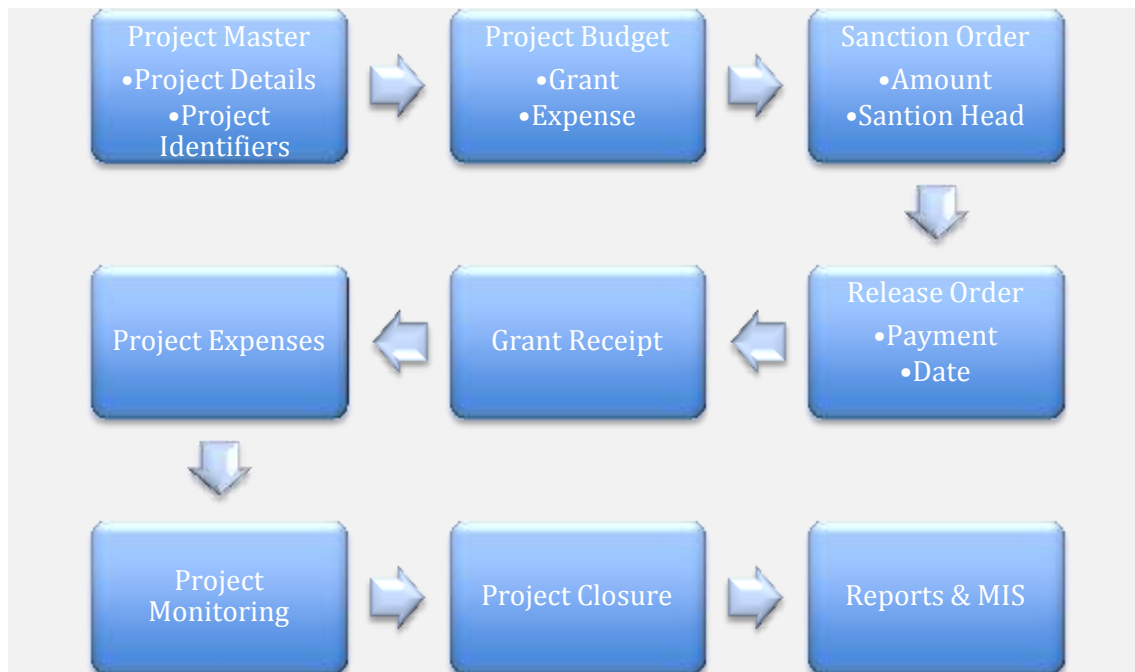


Figure 3 Project and Grant Lifecycle

Release Order: A release order refers to grant release schedule against a particular sanction order. There is a one to one relation between a sanction order and a release order. A release order may differ in amount / schedule of grants in comparison to amount defined in sanction order. There can be more than one release orders against a sanction order.

Grant Receipt: Once grant has been released by project sponsor /s, grant amount is verified and received by THSTI/RCB finance team. THSTI/RCB finance team updates information against a particular release order and follow up for pending amounts with responsible SPOCs. THSTI/RCB finance team may also confirm to project sponsor about grant and send an acknowledgement about financial transaction of receipts.

There may be surrender of grants, partially or wholly. The unspent amount may be allowed to be carried forward to next year on strength of a sanction order. There may be re-appropriation of grant with its constituent budget heads

Project Expenses: All Project expenses are recorded in ERP through an indent and this indent is approved by PIs. Procurement operations are defined under procurement and engineering processes. THSTI/RCB finance team also reviews and approves all project related expenses. A sanction order/ release order is a logical control for issuing a purchase order/ work order to any vendor/ service provider. Finance team can choose between sanction order and release order as a basis for their recommendation for purchase. Exception mechanism will be triggered in case of issuing an order beyond sanction amount.

Project Monitoring: Project monitoring is a continuous process and THSTI finance team may opt to monitor project finances and key events through proposed ERP. This will help finance team to manage finances better and avoid any emergency situations w.r.t. fund requirements.

Project Closure: A project is closed after completion of all project related activities. Finance team reconciles all expenses and grants against a particular project and refunds applicable balance amount to project sponsor.

Other Functionalities to be incorporated in the finance module are:

- ERP to Bank Interfaces and Reconciliation
- Cash Flow Management
- Automatic Cost Calculation
- Cost Calculation Mode Selection
- Cost Analysis
- Advanced Allocations
- General Ledger
- Invoicing/Billing

Procurement Processes

This ERP requirement is created to document following procurement processes followed at THSTI/RCB:-

- Equipment procurement
- Lab consumables / Lab services / Rate contracts

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- Service contracts (CHA etc.)
- Store & Inventory process
- Disposal of Goods (Scrap tender)

Following are approved methods of procurement at THSTI/RCB for different categories of goods / services being purchased at THSTI:-

Direct Cash Purchase: - This method is used for petty purchases under INR 25,000/- as per latest GFR guidelines. This can vary subjected to regulations at THSTI/RCB. This is done directly by authorized associates of THSTI/RCB (PI etc.), there is no need of inviting quotation for such purchases. User can purchase any goods / services subjected to value restrictions with pre-approval/ post facto approval from authority.

Purchase through LPC (Local Purchase Committee) – This method is used for purchases under INR250,000/- as per latest GFR guidelines. This can vary subjected to regulations at THSTI/RCB.

Purchase through Tenders

Following are the standard methods of inviting bids through tendering.

Advertised Tender Enquiry – Purchase Value > INR 25, 00,000/-

Limited Tender Enquiry – Purchase Value < INR 25, 00,000/-

Single Tender Enquiry – Items of Proprietary nature of any value

Electronic Reverse Auctions – Alternate mode of tendering for any value

Above limits can change subjected to THSTI/RCB rules & guidelines.

Direct purchase under Rate Contract: Rate contracted items can be purchased directly without inviting quotations by purchase departments against indent. More details are explained under rate contract tender.

Purchase through repeat orders: THSTI/RCB processes allow procurement of same items as repeat purchase from same vendor. This provision saves efforts of procurement team and THSTI management in executing purchase. Following conditions shall be valid for an order to be repeated:-

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- Order shall be less with same financial year
- An order can repeat maximum two times
- Repeat order cannot repeat itself
- There can be no change in per unit rate for an item
- There can be a change in taxes as per statutory laws

Procurement process is driven by type of purchase at THSTI/RCB and this is explained through detailed processes.

Following are **key masters** used by purchase team:-

Vendor Master : Vendor classification, vendor type, vendor code, name, address, contacts, vendor brief, product catalogue, bank details, statutory details, etc. All such details will be updated and maintained by purchase team and approved by THSTI/RCB nominated authority.

THSTI/RCB team expects a portal for supplier registration with specified list of documents as annexures for single/multiple categories of purchases by THSTI. Supplier can submit his request and THSTI procurement team will review and approve supplier request. Supplier registration will follow renewal cycle at a frequency defined by THSTI, this can vary for each category. Supplier can use old submitted data while at the time of renewal.

THSTI/RCB can blacklist/debarred a supplier with reason for a specified period with due approval. A debarred supplier cannot participate in any tender bidding.

A blacklist supplier cannot participate in any future procurement process of any kind with THSTI/RCB for specified period. THSTI/RCB team can decide on case to case basis for ongoing transactions with blacklist vendors.

Commercial Master: Payment terms, Inco terms, tax masters & other related masters for trade.

Item Master / Service Master: Code, Name, Multilevel classification, Properties, Manufacturer details, Commercial name, Price details, Taxes, UOM, etc.

Purchase Functions:

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Purchase functions are primarily divided into following categories and each category follows a unique process.

- ✓ [Equipment procurement](#)
- ✓ [Lab consumables / Lab services / Rate contracts](#)
- ✓ [Rate Contracts](#)

Equipment procurement

THSTI/RCB does keep procuring new equipment for projects and procure other project infrastructure related items on a regular basis. This type of procurement follows a little different approach due to non-repeatable nature of purchase.

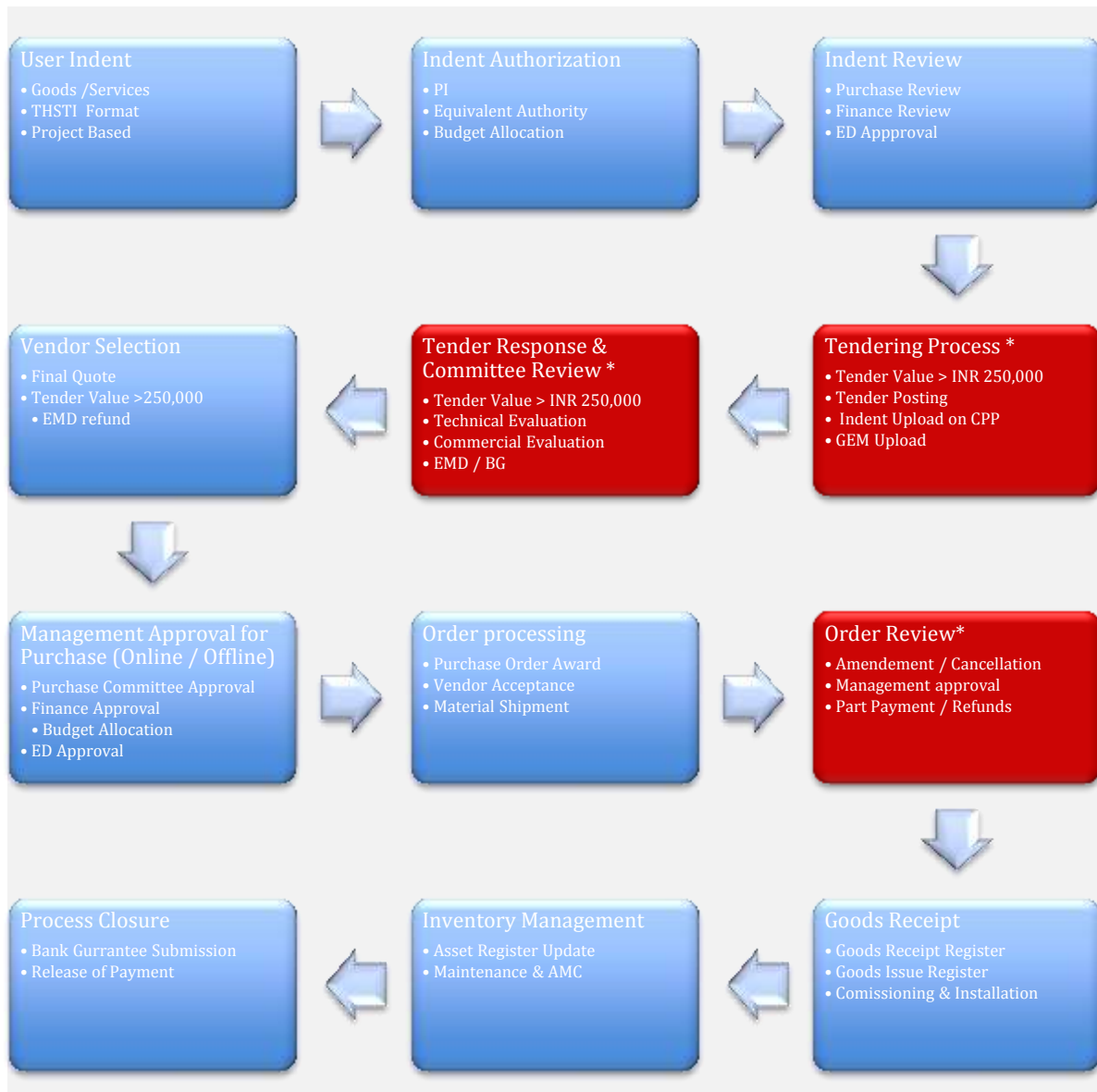


Figure 4 Procurement Process

***: Optional Processes**

User Indent: An authorized user shall be able to post indent with details of Item required, respective quantity, grant reference, commercial name, specification, project details, principal investigator and other specifications of Item through Indent Form. Application shall allow project level access authorization for a particular user to post an indent. There may be some projects with organization level

access to post indents. THSTI finance team will need flexibility to block any particular project for future Indent submission. This decision will depend on financial performance of a project and grants received by THSTI/RCB.

Indent Authorization: Indent process will follow maker / checker governance process. Each project will nominate one or more than one indent approvers (mainly principal investigators) to ensure correct data entry into ERP application. An approver shall be able to review all information in an indent and review history of similar indents against same project or similar items at the time of approval. This authorization also includes finance team approval and budget allocation for particular request.

Indent Review: An approved indents serves as qualified indents and this will be allocated to respective purchaser (based on item type / project). Purchase team will review indent and apply GFR rules related to procurement value to specific indent and follow appropriate purchase channel. E.g. Rule 146 - *Purchase of goods costing above Rs. 15,000/- (Rupees Fifteen Thousand) only and up to Rs. 1,00,000/- (Rupees One lakh) only on each occasion may be made on the recommendations of a duly constituted Local Purchase Committee consisting of three members of an appropriate level as decided by the Head of the Department.*

Tendering Process on CPPP / GEM / THSTI / RCB Portal: The Procurement department of THSTI and RCB must be facilitated with a complete e-tendering portal. Currently THSTI and RCB are using CPPP portal for e-tendering and e-publishing. However after ERP implementation, only the e-publishing module of CPPP will be used for the wide publicity and the vendors will be invited to complete the tendering process at THSTI and RCB's e-tendering portal. Proper automatic tender notification should be placed on the RCB or THSTI website's tender notification section. The portal should be able to cater the communication made in reply to the queries raised by the bidders. The tender opening committee has to digitally sign the online bids and only after obtaining the requisite signatures the tender shall be opened.

The e-tendering process should be made as per the CVC guidelines; latest GFR; IT Act 2000; CVC Guidelines on e-procurement (especially CVC Circular No. 18/04/2010 dated 26th April 2010); the e-Procurement Integrity Matrix of Transparency International India (TII); Government of India's e-Procurement Guidelines issued in August 2011 by STQC, Department of IT, Ministry of Communications & IT, Government of India; and 'Recommendations for Encryption Policy' u/s 84A of the IT (Amendment) Act, 2008 by the Data Security Council of India (DSCI), regarding 'Data Encryption' (i.e. bid encryption in the context of e-procurement)

Tender notification shall be also posted under procurement section of THSTI website. It would be desirable to link this advertisement with CPPP/ GEM wherever possible.

A tender can be cancelled at any point on time by approval of THSTI/RCB management. THSTI/RCB users shall have an option to close indent or re-tender procurement in such cases.

Tender response & committee review: Procurement department will receive two bids (commercial and technical bids) as per GFR guidelines and THSTI & RCB internal procedures. Bids will be opened in presence of particular bid committee and ERP shall allow procurement team to record details of committee members and date / time of bid opening for future reference. THSTI team would upload vendor bids to indent so that data is stored at central location and available for all reviewers as a reference.

Procurement team ensures that EMD / BS clauses have been met by vendor and records these details for further tracking with finance. Bidders from Micro and Small Enterprises (MSE) or registered with the Central Purchase Organization (CPO) or the concerned Ministry or Department are excluded from submitting EMD / BS. EMD / BS value should ordinarily range between two percent to five percent of the estimated value of the goods to be procured. Proposed ERP shall capture financial document details for EMD / BS and allow THSTI/RCB team to track / refund / extension of the same financial instrument as per THSTI/RCB requirement. EMD / BS register shall be maintained in proposed ERP and accessed by authorized users.

Vendor selection / Final quote: THSTI/RCB team reviews all bids technically and commercially after review and approval with Principal investigators and other teams. Purchase department can organize negotiations and clarifications from vendor and update these details against vendor bid.

Management Approval: Final committee and procurement recommendations are presented and approved by THSTI/RCB management before placing an order. THSTI/RCB purchase team will decide about taking an online or offline approval from management on case to case basis. In case of Online approval approvals will be obtained through ERP.

If THSTI/RCB team decides to take off line approval, in this case, ERP shall support printing of all related documents and obtaining offline approval (signatures) from different committees (purchase committee,

finance & ED approval). ERP shall support downloading and uploading of information (signed documents) as a repository of offline approval for future references.

Order Processing: Procurement department places an order with indent details to selected vendor. Purchase team wants system to initiate refund of EMD for unsuccessful bidders and track refund status through ERP. THSTI finance team wants to use ERP application as a budget control measure before placing order through a particular budget; ERP application shall provide option to block issuance of purchase order for a particular project budget.

Order Review: There may be a case when order is edited or cancelled by THSTI/RCB due to business reasons. Usually an order can be cancelled before 100% supply of material only, in case of part supply THSTI/RCB team will amend order quantity to supplied quantity and cancel balance order. Payment will be made against material supplied by vendor. An order amendment / cancellation will undergo same workflow approval cycle as order approval cycle.

In case an order is cancelled, THSTI/RCB procurement team shall have option to raise fresh procurement (Tender / Direct purchase/ rate contract etc.) for cancelled quantity or close this indent.

Goods / Service Receipt: Material supplied by vendor is received by THSTI/RCB through Gate Entry against purchase order. This material is checked by indenter for required quality and accepted material is issued to requesting lab / department with responsible owner through asset register entry.

There is no gate receipt process in case of a service delivery however invoice is approved by indenter in this case and finance team clears payment based on approval comments on invoice.

THSTI team also expects to record/ track performance guarantee security (normally 5% -10% of purchase value) submitted by vendor through approved mode of finance as per tender clause.

Inventory Management: THSTI/RCB team creates an asset ID for each asset and updates material asset register of THSTI. Asset history is tracked by maintenance team, asset ownership transferred by procurement to respective laboratory and asset value is regularly updated by finance team until end of life for asset.

Payment process and Indent Closure: After successful receipt of goods / services by requestor, finance team gets acknowledgement and releases payment as per payment terms of order. Finance team also reviews and tracks BG / any other caution money kept aside for performance related guarantees.

In some cases it is expected by vendor that advance payments are released for obtaining goods/services at THSTI/RCB. Proposed ERP shall facilitate recording approvals and reasons for all advance/part payments. A separate register shall be maintained for advance as well as part payments with all relevant details.

Note: - THSTI does receive EMD / BG from all participating vendors based in tender conditions. THSTI/RCB wants to trace EMD ledgers for all tenders and ensure that EMD return process is triggered as part of tender closing through a EMD return request trigger to Finance Department so that EMD is returned to unsuccessful vendors. Similarly THSTI/RCB team expects that BG submitted by bidders / vendors shall be tracked through ERP and ERP shall guide responsible Users / Departments to return BG after their expiry.

Lab consumables / Lab services / Rate contracts

THSTI/RCB can procure certain goods and services without raising a tender based on GFR procurement guidelines. THSTI/RCB being a research organization and procures some services from external vendors on a regular basis as well as one time purchase. These services include areas of laboratory testing and analysis, external consultancy for projects and outsourcing of engineering work as some prominent examples. Some of key goods falling in this category are laboratory consumables, maintenance consumables and other regular consumables.

User Indent: An authorized user shall be able to post indent with details of Item required, respective quantity, grant reference, commercial name, specification, project details, principal investigator and other specifications of Item through Indent Form. Application shall allow project level access authorization for a particular user to post an indent. There may be some projects with organization level access to post indents. THSTI/RCB finance team will need flexibility to block any particular project for future Indent submission. This decision will depend on financial performance of a project and grants received by THSTI/RCB. In some cases these indents will be raised against a user request / requests (maintenance request) to maintain a complete trail of indent.

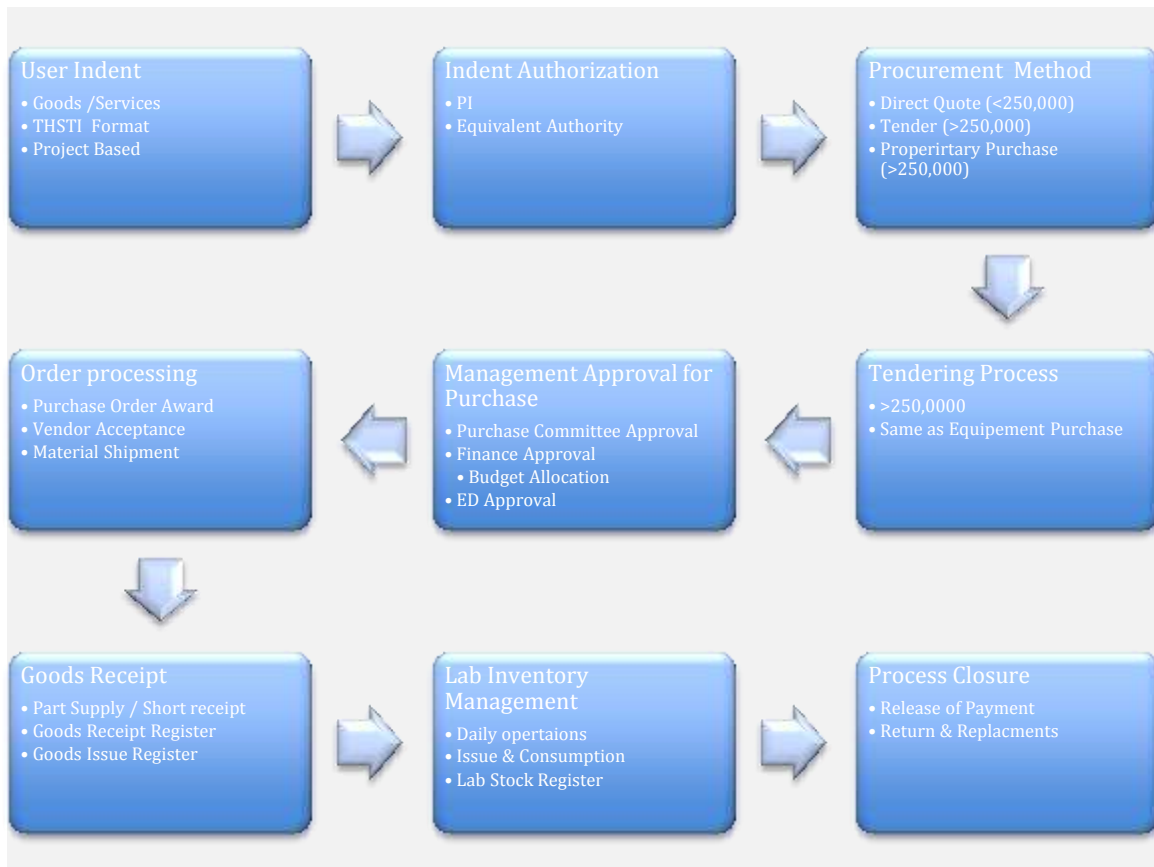


Figure 5 Consumables Procurement

Indent Authorization: Indent process will follow maker / checker governance process. Each project will nominate one or more than one indent approvers (mainly principal investigators) to ensure correct data entry into ERP application. An approver shall be able to review all information in an indent and review history of similar indents against same project or similar items at the time of approval.

Procurement Method: An approved indent serves as qualified indents and this will be allocated to respective purchaser (based on item type / project). Purchase team will review indent and apply GFR rules related to procurement value to specific indent and follow appropriate purchase channel. Procurement team reviews similar past purchases and calls for quotes from suppliers. These quotes are reviewed and presented to management for review.

Tender Processing: Tender processing process remains same as defined under *Equipment procurement* section. Other procurement methods could be *Rate contract*, direct purchase based on indent value and provisions specified under GFR guidelines.

Management Approval: Indent is reviewed by finance team and budget is allocated by finance team. Budget allocation is a critical step for Indent to move forward. Post budget allocation, purchase committee and management recommendations are presented and approved by THSTI/RCB management before placing an order. This authorization also includes finance team approval and budget allocation for particular request.

Order Processing: Procurement department places an order with indent details to selected vendor. THSTI team also expects to record/ track BG submitted by vendor as per tender clause. THSTI/RCB finance team wants to use ERP application as a budget control measure before placing order through a particular budget; ERP application shall provide option to block issuance of purchase order for a particular

Goods Receipt: Material supplied by vendor is received by THSTI/RCB through Gate Entry against purchase order. Under current landscape THSTI team logs incoming data through VMS application, while presently RCB is doing it manually, VMS is proposed for RCB, to acknowledge receipt of material. Material and related documents are handed over to procurement department for further usage and movement.

Lab Inventory Management: Procurement department reviews material along with indenter for required quality / quantity and accepted material is issued to requesting lab / department with responsible owner through asset register entry. In case of service, service report is acknowledged by authorized service user. In case of a short receipt / quality defect material is returned / replaced / payment forfeited based on case to case. Proposed ERP shall allow THSTI/RCB to conduct all such transactions.

Payment process and Indent Closure: After successful receipt of goods / services by requestor, finance team gets acknowledgement and releases payment as per payment terms of order. Finance team also reviews and tracks BG / any other caution money kept aside for performance related guarantees. In

some case if a defect is found by Lab team, Lab chemicals can be returned to vendor based on procurement clauses.

Rate Contracts

THSTI/RCB enters into annual rate contract with Lab chemical manufacturers. A vendor offers standard rate card for his product catalogue and some discounts to THSTI/RCB. THSTI/RCB may order against a rate contract to a vendor on need basis only skipping tendering process.

Annual Rate Contract: Annual rate contracts represents standard rate agreements (renewed annually) with approved vendors for supply of materials. There is no quantity commitment from THSTI/RCB team and there is a possibility of zero supply under a rate contract. There is a standard discount offered by vendor through rate contract.

Tendering Process: THSTI/RCB team conducts tendering for rate contracts with vendor. Tendering process details can be referred under *Equipment procurement*.

Tender Response & Committee Review: Please refer *Equipment procurement*

Vendor Selection: Please refer *Equipment procurement*

Management Approval for Rate Contract: Please refer *Equipment procurement*

Award of Rate Contract: THSTI/RCB procurement team awards standard rate contract with product catalogue and other details for reference. This rate contract can be used by THSTI/RCB team for procurements of regular items to expedite process of procurement. A rate contract can be cancelled at any point during its tenure.

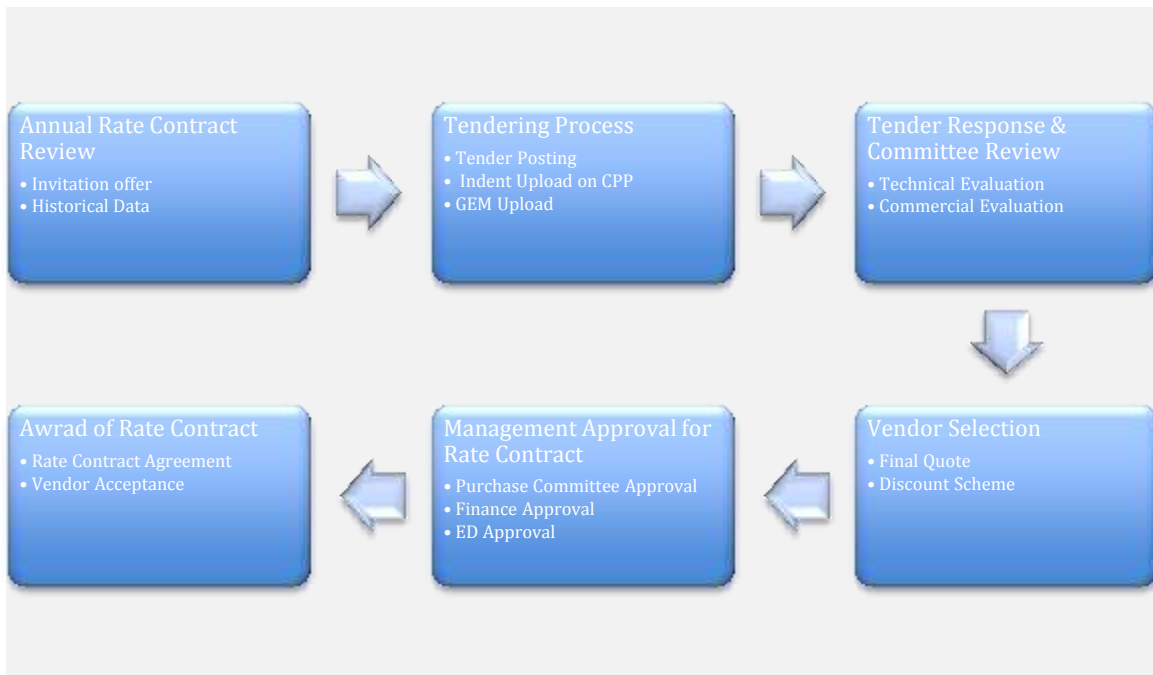


Figure 6 Rate Contract Agreement

Lab Service Contracts: - THSTI/RCB does consume some services through external parties and these services are monitored through an annual contract with Monthly billing services. Some examples of such services are as follows:-

- ✓ CHA services
- ✓ Project studies
- ✓ Sequencing services

Process of service contracts remains similar to rate contract for lab consumables. Details can be referred at *Rate Contracts*

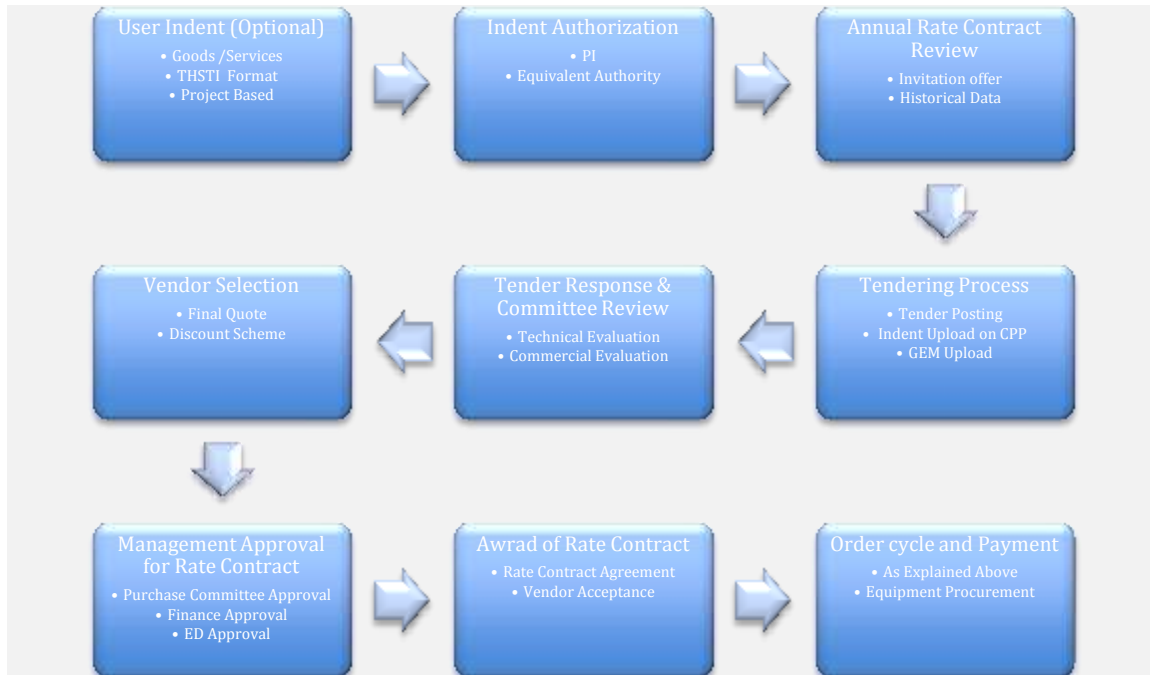


Figure 7 Procurement with Rate Contract

User Indent: An authorized user shall be able to post indent with details of monthly services requirements, Manpower required, evaluation criteria & specification, project details, principal investigator / approver and other specifications of service through Indent Form. ERP Application shall allow project level access authorization for a particular user to post an indent. There may be some projects with organization level access to post indents. THSTI/RCB finance team will need flexibility to block any particular project for future Indent submission. This decision will depend on financial performance of a project and grants received by THSTI/RCB.

Indent for a service contract will follow THSTI/RCB format and allow user flexibility to add annexures for ad hoc requirements from service provider.

Indent Authorization: Indent process will follow maker / checker governance process. Each project will nominate one or more than one indent approvers (mainly principal investigators) to ensure correct data entry into ERP application. An approver shall be able to review all information in an indent and review history of similar indents against same project or similar items at the time of approval.

Purchase review: An approved indent serves as qualified indents and this will be allocated to respective purchaser (based on item type / project). Purchase team will review indent and issue log sheet of running service contract (in case of repeat contracts) and look for improvements while asking for new quote from vendors. Procurement team will also apply GFR rules related to procurement value to specific indent and follow appropriate purchase channel. E.g. Rule 146 - *Purchase of goods costing above Rs. 15,000/- (Rupees Fifteen Thousand) only and up to Rs. 1,00,000/- (Rupees One lakh) only on each occasion may be made on the recommendations of a duly constituted Local Purchase Committee consisting of three members of an appropriate level as decided by the Head of the Department.*

This authorization also includes finance team approval and budget allocation for particular request.

Tender Posting / Indent Upload on CPP: Procurement department shall download all indent information and upload on CPP portal. Procurement user will fill all required details based on type of tender manually and start track CPPP for vendor responses and queries. ERP shall be flexible to record references of CPP and other references w.r.t. tender advertisement.

A tender can be cancelled at any point on time by approval of THSTI management. THSTI users shall have an option to close indent or re-tender procurement in such cases.

Tender response & bid evaluation: Procurement department will receive two bids (commercial and technical bids) as per GFR guidelines and THSTI/RCB internal procedures. Bids will be opened in presence of particular bid committee and ERP shall allow procurement team to record details of committee members and date / time of bid opening for future reference. THSTI/RCB team would upload vendor bids to indent so that data is stored at central location and available for all reviewers as a reference. Procurement team ensures that EMD / BG clauses have been met by vendor and records these details for further tracking with finance.

Vendor selection / Final quote: THSTI/RCB team reviews all bids technically and commercially after review and approval with Principal investigators and other teams. Purchase department can organize negotiations and clarifications from vendor and update these details against vendor bid.

Management Approval: Final committee and procurement recommendations are presented and approved by THSTI management before placing an order. THSTI/RCB purchase team will decide about

taking an online or offline approval from management on case to case basis. In case of Online approval approvals will be obtained through ERP.

If THSTI team decides to take off line approval, in this case, ERP shall support printing of all related documents and obtaining offline approval (signatures) from different committees (purchase committee, finance & ED approval). ERP shall support downloading and uploading of information (signed documents) as a repository of offline approval for future references.

Purchase Order and Material Receipt: Procurement department places an order with indent details to selected vendor. Purchase team wants system to initiate refund of EMD for unsuccessful bidders and track refund status through ERP. THSTI team also expects to record/ track BG submitted by vendor as per tender clause. Different services are received at specified frequencies in service contract and monitored by FMS (Facility Management team). There is an issue register for each type of service and an authorized user can log issues faced by THSTI/RCB team while consuming services under a contract, this optional log of issues can be reviewed by procurement / management at the time of contract renewal.

Payment process and Indent Closure: A Monthly bill (or bill as per frequency specified in contract) is submitted by vendor and this is reviewed by THSTI/RCB appointed auditors and facility team (or any other nominated team). This bill is approved by Management and finance team release payment for vendor.

Note: - THSTI/RCB does receive EMD / BG from all participating vendors based in tender conditions. THSTI/RCB wants to trace EMD ledgers for all tenders and ensure that EMD return process is triggered as part of tender closing through a EMD return request trigger to Finance Department so that EMD is returned to unsuccessful vendors. Similarly THSTI team expects that BG submitted by bidders / vendors shall be tracked through ERP and ERP shall guide responsible Users / Departments to return BG after their expiry.

Inventory Management:

THSTI/RCB procurement team proposes to introduce inventory management processes for tracking of different consumables and storage items for different section of THSTI/RCB. Following are key departments storing and using inventory on regular basis:-

Research Laboratories: Research laboratories are key storage, installation and consumption unit for equipment's, services (testing etc.), lab consumables, hygiene items etc. A research laboratory may be associated with one or more projects and managed by more than one principal investigators. Laboratory consumables are receipt by authorized laboratory staff against indents. These consumables are stored in laboratory and consumed regularly. A user shall be able to post consumption of different chemicals against a project (optional) at a frequency of his convenience. (Daily/weekly etc.) Proposed ERP shall allow user to track inventory of consumables in a particular rack at laboratory and log transfer / consumption. User shall be able to capture batch, potency, expiry, production etc. details for a particular lab chemical.

A user shall be able to segregate and identify locations like rejection / scrap /quarantine etc. and track inventory in particular lab/ location.

Inventory Transactions



Figure 8 Inventory Transactions

Engineering Stores: THSTI/RCB engineering team stores and issues different engineering consumables to reap benefits of volume ordering and save time to service user concerns. These items are regular usage category and may fall into different categories like electrical, civil, IT related materials. These consumables can be used at any place across THSTI campus.

Hygiene Stores: THSTI/RCB has contracted with external vendor for hygiene services however certain consumables are beyond scope of this contract. THSTI/RCB admin team follows procurement process and stores such items at hygiene stores and issues to vendor. THSTI/RCB wants to log inventory transactions related to hygiene materials for transfer, issue, receipt and check logs through reports.

Disposal Process

Disposal Proposal: An item can be declared surplus or obsolete or unserviceable if the same is of no use to THSTI. The reason for declaring an item surplus or obsolete or unserviceable should be recorded by the designated authority or by disposal committee constituted for the same.

A report for disposal of goods shall be prepared in specified form (GFR-10) and submitted for approval in proposed ERP for initiating disposal process. Disposal form shall contain details like book value, guiding price, reserved price, asset details along other details of disposal and asset.

THSTI team can use one of following methods for disposal:-

- Disposal through Tender
- Public Auction
- Sales at Scrap Value
- Direct Sales or other modes as decided by competent authority (residual value <INR 200,000/-)

Disposal Tender: - THSTI/RCB team auctions such items as disposal tender on need basis and this sale follows GFR guidelines specified by Government. THSTI/RCB team shall be able to classify disposal as normal, hazardous or other user defined categories. Disposal tender follows different process for capital goods / furniture and scarp sale above INR 200,000/-.

A tender can be cancelled at any point on time by approval of THSTI/RCB management. THSTI/RCB users shall have an option to close indent or re-tender procurement in such cases.

Following is typical cycle of disposal cycle at THSTI/RCB:-

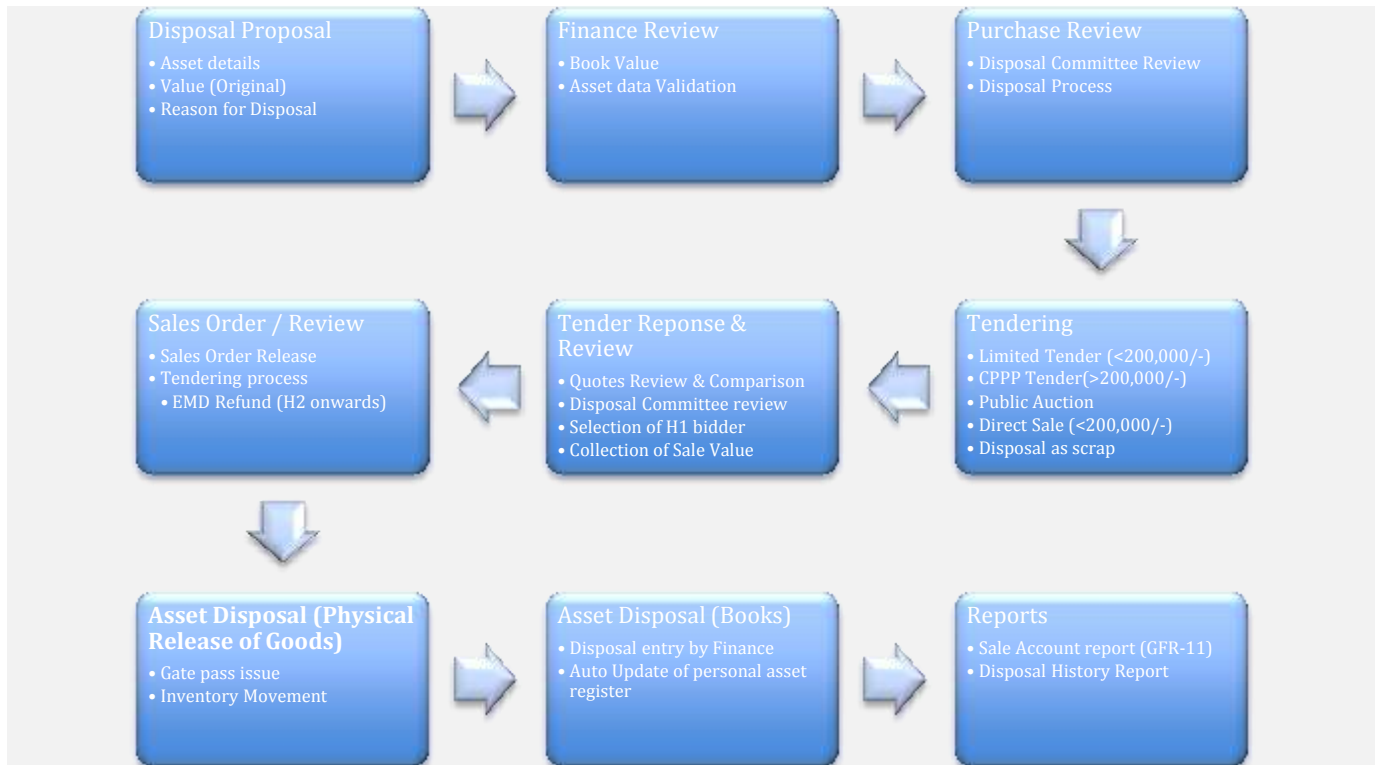


Figure 9 Disposal Process

Disposal proposal: Scrap proposals are submitted by authorized users to initiate scarp process. This form includes type of scrap (equipment, furniture, automobile, waste etc.) and details of assets (Asset ID, Asset description, Quantity, Make, Year of Purchase, Original Value of Asset) and reason for scrap initiation.

Finance Review: Finance team reviews scrap proposal w.r.t. financial details from asset register (original value, year of purchase, make, and depreciation) and updates present book value of asset.

Purchase Review: Purchase officer receives finance approved indent and initiates scrap review process as per GFR guidelines. Purchase team expects proposed application to help implementing GFR guidelines for scrap disposal enforced through logical rules. E.g. if value of goods is beyond INR 200,000/- a tender shall be floated through CPPP and Limited tender for scrap sale of value less than INR200,000/-.

User can read detailed guidelines available in public domain.

Tendering Process: Based on tendering requirement of GFR, procurement user will invite quotes of undergo CPPP tendering. Tendering process and review will follow same set of rules and approvals as detailed under projects procurement.

Tender response & review: Based on tendering requirement of GFR, procurement team will review tender responses of tenders. Tendering process and review will follow same set of rules and approvals as detailed under projects procurement. This includes bid receiving, bid opening, EMD / BG logging in application and collection of money from vendor.

Sales Order: After receiving all bids, THSTI/RCB team reviews and approves best bid and awards sales order to respective bidder. Proposed application shall trigger return of EMD for unsuccessful bidders and this process shall follow workflow for Finance / Procurement users.

There may be a case when order is edited or cancelled by THSTI/RCB due to business reasons. ERP. Usually an order can be cancelled before 100% supply of disposal only, in case of part supply THSTI/RCB team will amend order quantity to supplied quantity and cancel balance order. Payment will be made against disposal supplied by THSTI/RCB. An order amendment / cancellation will undergo same workflow approval cycle as order approval cycle.

In case an order is cancelled, THSTI/RCB procurement team shall have option to raise fresh procurement (Tender / Direct purchase/ rate contract etc.) for cancelled quantity or close this indent.

Asset Disposal (Physical Release of Goods): THSTI/RCB team in charge of disposal goods issues gate pass for release of goods and allows movement of inventory for disposal process.

Asset Disposal (Books): Asset disposal in financial books involve writing off goods at scrap value based on gate pass of disposal. This writing off shall update material asset register and write off material from books of THSTI.

Reports: Reports are mentioned under *Reports & MIS section*.

HR/ADMIN Processes

ORGANIZATION: - CURRENT ORGANIZATION OF THSTI/RCB IS AS UNDER WHICH SHALL BE DEFINED IN THE SYSTEM

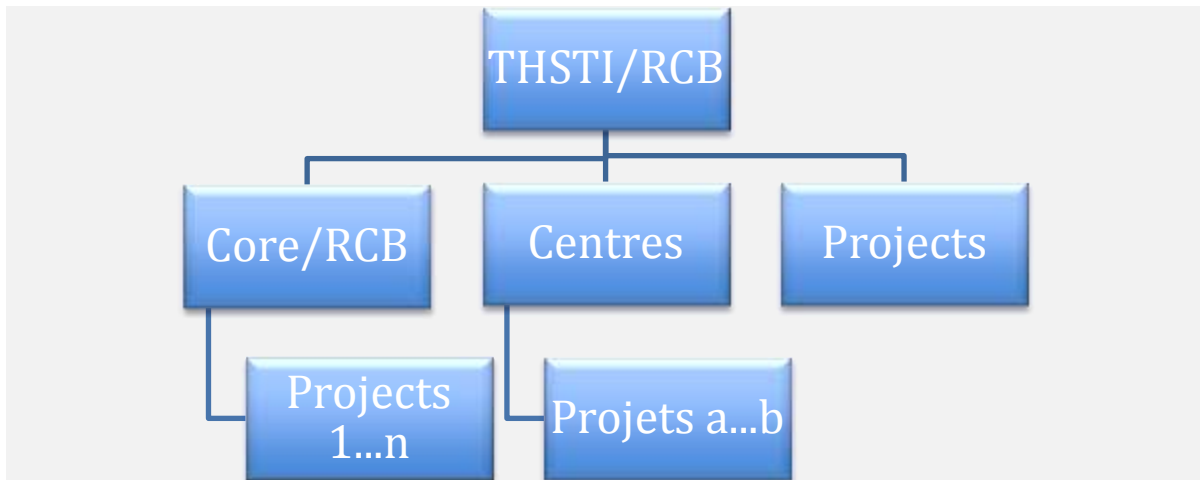


Figure 10 Organization Hierarchy

Currently both organizations are situated at NCR-Biotech Science Cluster, Faridabad-Gurgaon Expressway, Faridabad, Haryana.

System Flexibility required for multi-location – There may be creation of additional centres and additional projects.

Currently there are six centres and more than hundred projects in operation.

Human Resource Management (HRM) Process details

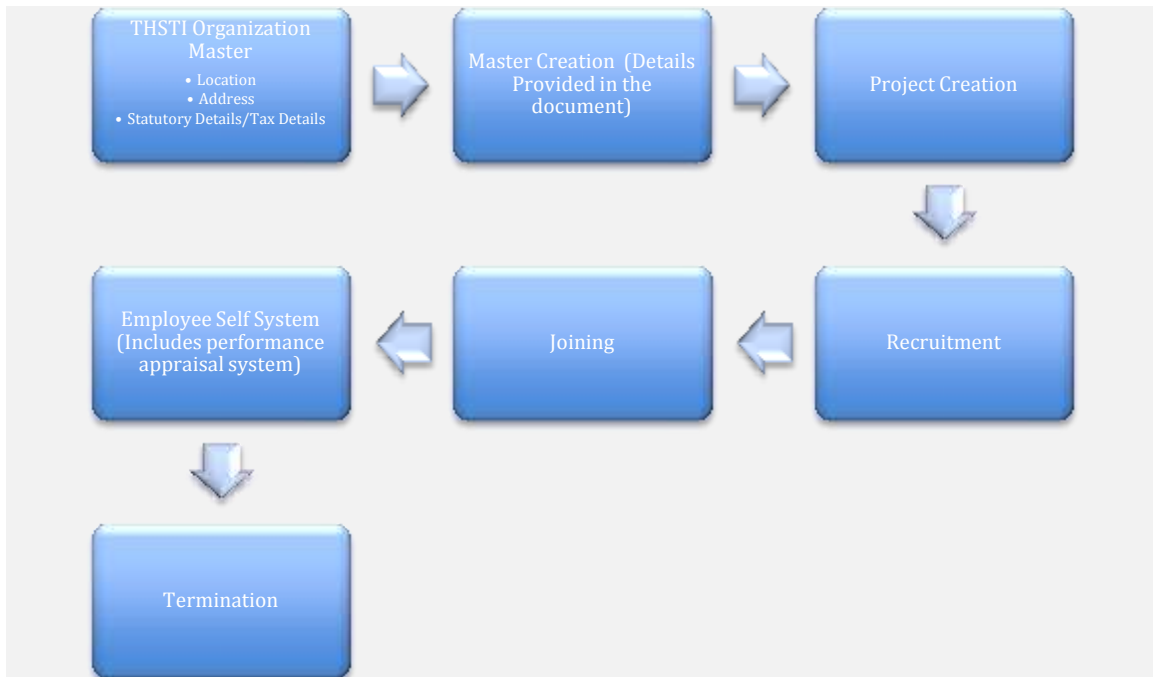


Figure 11 Employee Lifecycle

THSTI & RCB Organization Master

The system should be capable of multi-location and multi-currency and should capture the following details

Address of the organization

Location

Formation

PAN

TAN

TIN

ST No.

GSTN

Telephone No.

E-mail ID

Website Address

PF and ESIC

Employee Master

Employee type

Regular

Contractual

Outsourced (To be clarified, what control mechanism required in ERP)

Fellowship

Sponsored

Un-sponsored

Consultants

Honorary

General Information

First Name, Middle Name, Last Name

Employee Number

Designation

Department

Reporting Officer

Department Head

Core/Centre/Project

Address information

Permanent Address

Current Address

Personal Information

Father's Name/Mother's Name

Gender: - M/F/T

DOB

Religion

Caste

PAN No.

Mobile No.

Email Id

Aadhar Card

Blood Group

Emergency Contact Numbers

Dependents (Rules to be defined in LTC entitlement)

Father's income

Mother

Spouse

Unmarried Sister

Minor Brother

Children

Administration of Employee

Qualification

Previous Employment History (Name of organization, Experience: from to position wise, area of responsibility)

Finance Information

Pay Scale (selected from pay scale master)

Pay

Allowances:

DA

HRA (Fixed/variable as per rules)

Education Allowance

TA

DA on TA

Next Increment date

Joining date

Bank Details

Bank Name

Bank Account Number

IFSC Code

Branch Name and Address

Viewing and Updating Employee Master Data

HR Head/Senior Manager (A&F) or Authorizing authority approval required

Component defined in the below mentioned masters shall reflect in the employee master capturing the information against each. The key parameters like designation, department, pay scales, payment parameters, probation, and increments are too tracked over employment cycle of the employees.

Department Master

Finance and Accounts

Admin & HR

Purchase

Stores

Engineering

Other Departments

Designation Master (All designation will be defined here)

Executive Director

HR & Admin Head/Senior Manager (Admin & Finance)

Principal Investigator

Finance Officer/Administrative Officer

Section Officer

And so on....

Pay Scale Master (All applicable pay scale will be defined here with ID)

Allowance Master

HRA (rules as per user defined)

DA

TA

DA on TA

Deputation Allowance

Children Education Allowance

NPA

System flexibility is required for addition in the master

Leave Master

EL

HPL

CL

Maternity Leave

Child Care Leave

Paternity Leave

RH

Extra Ordinary Leave

WPL

Loan & Advance Master

House Building Loan

Vehicle Loan

LTC Advance

Tour Advance

Deduction Masters

NPS (user defined rules)

LIC

RD

License Fees

CGHS

GSLIS

TDS

Ad-hoc Payment Master

Any ad-hoc component like Honorarium, overtime in certain circumstances, shall be defined here.

HRM Workflow

Project Sanction

Projects idea conceived by the principal investigator (PI) (belonging to core or centres) are sent to project sponsor(s). The same idea of project are sent to HRM for creation of project ID in ERP System with all the details of project. The project ID will be created by HRM.

Sanction order is received from sponsor(s) contain grant amount, with components of equipment budget, expenses budget, manpower budget – numbers, post, emoluments and other details. HR shall enter details of sanction order in the project id. The system shall have built-in feature for monitoring & controlling the expenditure within the grant amount (and periodical release of funds) as well as number of posts and manpower cost.

Recruitment Process:

HR/Admin shall start process for recruiting resources for meeting the requirement of sanctioned project.

Advertisement for recruitment with details of posts, number of posts, emoluments, qualifications, experience, terms of employment, application submission date, documents required etc. etc. shall be prepared in ERP system.

Advertisement should be uploaded on THSTI/RCB's website through auto link for online submission of applications by the prospective candidates.

HR/Admin will download applications from website to ERP system. The system should be capable of making a comparative chart against all parameters of advertisement with edit options.

HR/Admin shall screen online and make shortlisting for potential applicants.

Report shall be generated for shortlisted and other than shortlisted candidates.

List of the shortlisted candidates shall be sent to screening committee members and chairman.

Workflow for creation of screening committee – HR/Admin shall generate proposal for screening committee members through ERP against the given advertised posts and the same shall be forwarded to authorizing authority for approval. The authorizing authority may edit the proposal and include some other names.

Screening committee shall screen and select candidates from shortlisted or non-shortlisted list for interview. Interview letter shall be generated from the ERP system containing details of post and user entered details for time, date and other instructions. These may be emailed to candidates as per their email id provided by them in application. (There shall be printing options for interview letters as well as)

Constitution of selection committee: - Proposal for selection committee shall be given by HR head/Senior Manager (A&F) or ED. There shall be an edit and delete option in ERP system for editing or deleting selection committee. Selection committee shall conduct interview of candidates and select candidates for joining. List of selected candidates shall be informed to HRM.

HRM shall send list of selected candidates recommended by selection committee to ED for approval.

Once selected candidates are approved by ED, HR/Admin shall generate offer letters through ERP system with basic details of selected candidates contained in ERP and terms and conditions of employment. These may be sent on email Id of candidates as per email id provided by them in application. (There shall be printing options for offer letters as well as)

Joining

New employee shall be created in the system with prefix of core/centres/projects and running serial number generated by system as employee code with separate series for each employee type. Employee code to be generated along with generation of office order. Employee details shall be entered as per the employee master requirements for online recruitment. Available information shall be fetched from application as per the reference No. of application. If employee is already in employment of the organization then information will be fetched by previous employee code reference with their employment history and all other required details. (Edit option shall be available)

Various declarations shall be generated by ERP with employee details as per predefined formats and contains. There shall be checklist of documents to be submitted by the employee with reference to qualification, identity proof, address proof, DOB etc. and attachment functionality for the documents.

There shall be approval for joining by HR head and generation of office order for joining. This shall be multi session process.

Probation

System should start giving an alert from 30 days before of probation period end. Assessment form should be generated to system and HR/Admin should forward it to reporting officer and approving authority for approval. There shall be confirmation/probation extension/termination. With confirmation, office order shall be generated. If probation extended then system should capture the extended period of probation. Same confirmation alert for revised probation period shall be initiated before 30 days of probation ends. In case of termination, full and final process shall begin.

Contract period monitoring

System shall give notification prompting the approaching date of termination of contract from 30 days before the end of contract period date

There shall be four actions:-

- Regularization till the date of retirement
- Regularization with promotion with probation period
- Contract Extension
- Re-Assignment in other contract- it may include promotion, Pay revision, Re-designation

Termination

HR/Admin department shall generate the form and forward to reporting officer and authorizing authority for approval.

Increment Process

There are rules applicable for granting an employee increment based on certain parameters however next increment date is being captured in employee master. The system shall prompt thirty days before the due date for initiation of due increments. Workflow be provided for seeking assessment of reporting officer & Head of the Department then approval by multiple authorities.

Pre-defined increment order be generated from the system and next increment date to be filled in for each employee. Change in emoluments shall be captured in employee master with effective date and revised salary to be released with arrears processing as the case may be.

Full and Final Settlement

If an employee is getting termination or service is terminating on completion of contract or retiring on attaining superannuation, notification shall be issued by system 30 days in advance to HR. HR shall generate no dues form which will be printed and given to employee. On receiving back no dues form, all concern department/authorities shall be notified by the system. The department will trigger full and final settlement and enter the date of end of service. An office order will be generated online and transferred to employee's reporting officer and finance department. Finance department will process full & final settlement through payroll.

Employee Self system (Including performance appraisal system)

The following functions shall be performed by the Employee Self System:

- Leave application
- Tour application
- Loan application
- Reimbursement application
- Performance appraisal
- Employee profile management (for defined attributes)
- LTC (user defined rules to be captured)

There shall be workflow for all functions, the employee will enter using their login Id and which will have workflow to go his reporting officer and multi-level approving system. There shall be a dashboard for each employee showing pending task or request generated by them including status.

The employee will enter all details and documents to be forwarded (Bill No., Date, Amount, Description or any other documents). On approval, the employee shall print approval letter and attach all supporting documents and forward to concerned department.

HR shall initiate performance appraisal activity for the reporting period. On activation, system will alert all the employees asking them fill the form on Employee Self System. There should be provision for multiple sessions for filling the form with a tab of save in draft. On submission, workflow shall begin for multiple level approvals.

Attendance and Time Management

Organization has installed Biometrics for attendance of employees-on-roll. Biometric attendance system needs to be integrated with the payroll system.

Those employees who do not punch in the Biometric system that is the employees posted outside the organization, their attendance will be marked by HR/Admin based on the attendance data received from their respective HODs. Hence the payroll system needs to have functionality of marking attendance of these types of employees.

Tax Computation Module

Tax Component Master

All Payment and deduction components defined in HR Module shall be auto populated here and there taxability definition shall be defined by users. Any new component defined in HR module shall get auto populated.

Tax Computations

ERP should have provision for computation of individual income tax applicable to individuals- males, females, senior citizen/super senior citizen as per income tax act applicable. There should be compliance

for clubbing income from other sources and house property and capturing TDS deductions outside the organization for computation of total taxability of employees.

Tax Projections

ERP should have provision for computation of income tax on projected income & projected tax deductible investments declared by the employees for equated monthly deductions (TDS) from pay of respective employees. System shall have facility to run projection periodically per employee basis/employee type/location to make adjustment of tax deducted and to be deducted.

Tax deduction certificates & annual Return

ERP System shall be compliant for issue of tax deduction certificates for individual employees in the applicable formats and preparation of statutory return applicable for such TDS.

Engineering Processes

This section summarizes Engineering processes followed at THSTI/RCB for Engineering activities are carried out at THSTI to address following requirements:-

- New Projects
- Repair Works
- Consumables Replacement
- Maintenance Services
- AMC Contracts
- CMC Contracts
- Other Contracts

Above activities can be accomplished through internal staff, external outsourcing or a mix of both (partially internal / partially external). Engineering activities follow THSTI/RCB guidelines for approval (value based), supplementary work (tolerances) and guarantee / warranty clauses impacting final payments.

This document serves the purpose of a central document for above processes, related functions, information flow, decision making and respective ownership across organization. THSTI/RCB team has made its best effort to explain different processes and steps however processes can change in future to suit business and statutory need and ERP shall be flexible enough to accommodate such changes.

Following are approved methods of procurement at THSTI/RCB for different categories of goods / services being purchased at THSTI/RCB:-

Direct Cash Purchase / Petty Works: - This method is used for petty **works / purchases** under INR 25,000/- as per latest GFR guidelines. This can vary subjected to regulations at THSTI/RCB. This is done directly by authorized associates of THSTI/RCB (PI etc.), there is no need of inviting quotation for such **Works / purchases**. User can purchase any goods / **execute any works** subjected to value restrictions with pre-approval/ post facto approval from authority.

Works / Purchase through LPC (Local Purchase Committee) – This method is used for purchases under INR250, 000/- as per latest GFR guidelines. This can vary subjected to regulations at THSTI/RCB.

Purchase through Tenders: - Following are the standard methods of inviting bids through tendering.

- Advertised Tender Enquiry – Purchase Value > INR 25, 00, 0000/-
- Limited Tender Enquiry – Purchase Value < INR 25, 00,000/-
- Single Tender Enquiry – Items of Proprietary nature of any value
- Electronic Reverse Auctions – Alternate mode of tendering for any value

Above limits can change subjected to THSTI rules & guidelines.

Direct purchase under Rate Contract: - Rate contracted items can be purchased directly without inviting quotations by purchase departments against indent. More details are explained under rate contract tender.

Works / Purchase through repeat orders: THSTI/RCB processes allow procurement of same items as repeat purchase from same vendor. This provision saves efforts of procurement team and THSTI/RCB management in executing purchase. Following conditions shall be valid for an order to be repeated:-

- Order shall be less with same financial year

RFP for ERP solution at THSTI and RCB

- An order can repeat maximum two times
- Repeat order cannot repeat itself
- There can be no change in per unit rate for an item
- There can be a change in taxes as per statutory laws

Engineering services and activities can be accomplished through multiple modes, this may involve in house repairing /work done by internal staff, external outsourcing or a mix of both (partially internal / partially external).

Engineering activities shall follow THSTI/RCB guidelines (based on GFR/ CPWD/ Market based survey) for approval (value based), supplementary work (tolerances) and guarantee / warranty clauses impacting final payments.

Following are key categories of operations for Engineering team however there may be single/ multiple engineering teams involved to each type of category:-

Engineering Works:

Engineering works are categorized under following main categories based on organization set up at THSTI:-

1. Electrical & Allied Works: HVAC systems, DG Set, Electrical, Telephone, Solar, Lift, Scientific Instruments, Firefighting systems, Miscellaneous
2. Civil Engineering Works: All civil renovation & maintenance works, water supply system, sanitary system, partition & ceiling works, wooden furniture works, film frosting & painting works, internal signage, utility services (pump house, sewerage system & STP), horticulture works, external roads etc.
3. IT Services: Hardware, Software & New projects
4. **Engineering Assets:**

Engineering team at THSTI/RCB monitors new work and maintenance performance through Asset IDs. Engineering team shall use assets defined by Finance team for all engineering allied services category &

IT services. Engineering team shall be able to capture asset details, make, guarantee, warranty, AMC, CMC details for a particular asset and these details shall be visible to engineering team at the time of performing Engineering Works.

Civil Engineering work will be monitored by location metrics (building, floor, and area), type of work (floor, furniture, painting, door etc.) and unit of measurement (square feet, numbers, cubic feet & meters etc.) and other variables as specified under CPWD guidelines & IS : 1200 mode of measurements.

Each engineering activity is originated by engineering work request raised by an authorized user of THSTI.

Asset History:

Engineering team will maintain operational history of each asset, building and other maintenance works related items. This history will start from procurement, installation, issues reported and repair/ maintenance/ renovation / relocation/ services/ AMC performed on this asset. Asset history shall be integrated with Finance systems and show value of asset until disposal. Engineering user shall be able to print asset history or save as soft copy (PDF) for reference and sharing purpose.

Engineering Works Process: Following is sample process of performing Engineering related services at THSTI/RCB:-

Engineering Works: - Engineering works at THSTI origin with a request from user. This request can correspond to a repair/renovation (Job Work) or new work (Job Indent).

Following is a representative cycle of Works request fulfilment by Engineering section at THSTI/RCB:-

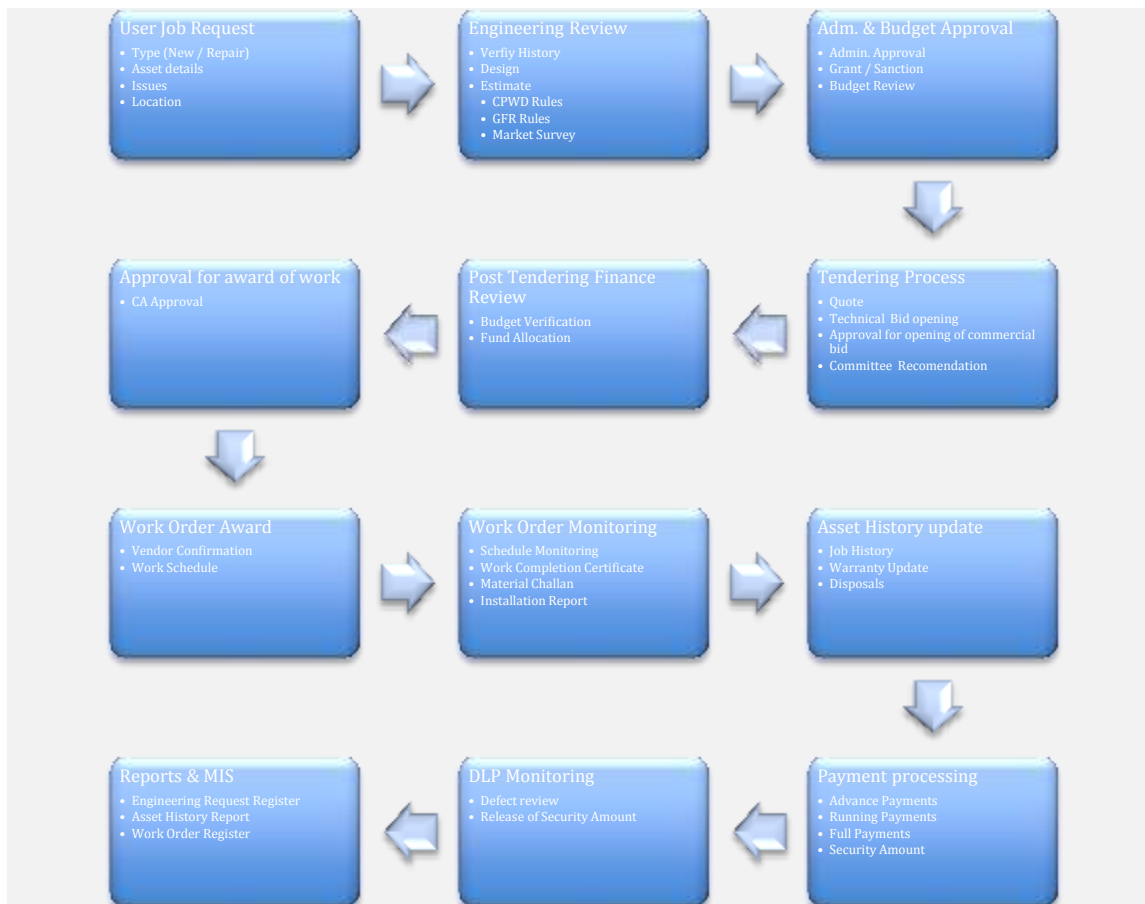


Figure 12 Engineering Process

Job / Indent Request / New Projects: A user of THSTI/RCB creates a maintenance job/indent detailing issue faced details, type of job, category / sub-category of issue, date/time, project details and priority of issue.

Each indent will have a unique ID based on THSTI/RCB driven logic, THSTI/RCB would like to monitor user request by category of request. This indent can be printed by User and mail notification shall be directed to concerned users / engineering division at the time of creating indent. Indent will undergo approval based on type, project and other optional logical parameters required by THSTI/RCB.

An indent will have multiple status (open, submitted, rejected, hold, under process, completed etc.) based on logical state of indent.

Engineering Review & Estimate: Each indent will be looked after by respective engineering division in charge based on type of engineering services.

Engineering team will prepare work/ item/ product specification, service specification, cost and time estimates for particular indent and add any optional remarks about execution of particular indent. Engineering team also mentions external / internal execution for a job indent. These rules are governed by CPWD / GFR/ Market survey.

Internal executions: Concerned engineering in charge will take action and complete the job with in-house sources. Engineering division will inform concerned user about completion of job and update job indent to closure. Internal Executions are closed at this point of time however external executions remain under process.

Sometimes a consumable from Engineering store may be used / issued to service particular work request. These consumables are procured through procurement section of THSTI by engineering requests and inventory records are maintained in material asset register (MAS Accounts Register).

External executions: Respective engineering in charge will make the estimate and put up for approval as per the guidelines of THSTI/RCB and get the work completed.

Admin & Budget Approval: Updated estimates will undergo approval (based on nature of works) for time and estimates by authorized users of engineering department. This approver can add his remarks, send indent back to originator, update his comments w.r.t. cost, time etc.

Tendering Process: Under this activity engineering team / procurement team based on nature of works, services; THSTI/RCB team sends query to vendors / hosts tender by calling quotations / limited tender/ open tender on CPPP portal for vendor quotes and offers. Raising a tender / supplier quote or other procurement method depends on GFR/CPWD guidelines.

Quote Evaluation: THSTI/RCB team opens vendor bids / quotes as per guidelines, performs comparison analysis and updates bid committee decisions for particular quote. Maintenance committee also evaluates and reviews submitted bids and selects final vendor and applicable quote. Existence of a committee is optional and subjected to nature of work.

Post Tendering Finance Review: THSTI & RCB finance team reviews and assigns budget from particular project for particular indent based on cost estimates. This is primary check for budget availability and arrangements for funds by THSTI for servicing Job indent.

Approval for award of Work: Post tendering process and finance approval, work order contract is created after approval from CA. Work order awarded contains details of works, product, services, completion criteria, and time, cost and quantity details. Work order can be printed, signed and shared with vendor through Mail. A notification can be sent to THSTI & RCB stakeholders after awarding Work Order contract. Execution of agreement with vendor is completed offline as per CPWD guidelines.

Work Order Monitoring: THSTI & RCB engineering team regularly reviews and monitors progress of work order with external vendors for quality of work and schedule adherence. After completion of work engineering division in-charge will inform concerned user about completion of job and update job indent to closure. Engineering team will also update asset record along with dismantle / dispose of details. Dispose of process is similar in steps across THSTI & RCB and can be referred under purchase section processes.

Asset History Update: Engineering team will maintain operational history of each asset, building and other maintenance works related items. This history will start from procurement, installation, issues reported and repair/ maintenance/ renovation / relocation/ services/ AMC performed on this asset. Asset history shall be integrated with Finance systems and show value of asset until disposal. Engineering user shall be able to print asset history or save as soft copy (PDF) for reference and sharing purpose.

Payment Processing: Vendor submits his invoice after successful work completion to engineering / procurement team and this invoice is approved by user with comments. Invoice is shared with Finance team and finance team can review work order status and remarks before disbursing payments. In some cases a particular amount is kept aside as guarantee/ warranty security.

DLP Monitoring: Defect Liability Period / Maintenance period may apply to some assets based on agreements with vendor. Under this period all defects are repaired by vendor at concessional charges (free). Engineering team expects to log defects through proposed ERP application and monitor fixing by vendor.

Reports & MIS: THSTI & RCB team will need reports about Job Indent Register, Work order Register, Delay Report/ Indent Ageing/ Work Order Status.

Academic Processes

RCB offers following academic courses through its campus in Faridabad and satellite centres across INDIA:-

- 1. PhD Programme:** The Centre invites post-graduate candidates from this region who have obtained M. Sc. degree in any field of Science (or equivalent) to work under the mentorship of its faculty as Junior Research Fellows (JRFs). Preference will be given to the candidates having intense interest to work at the interface of multiple disciplines in the areas related (but not limited) to structural, systems, synthetic and chemical biology, tissue engineering, analysis of complex diseases for identification of intervention points and development of knowledge-based drug discovery strategies. The fellowship is available for five years following regulation of such Institution viz. DBT, DST, UGC-CSIR etc. The candidates who have completed their MSc within past two years and have scored 60% or more marks in their graduate and post-graduate degree examinations are eligible to apply against specific advertisements that will appear from time to time.
- 2. Young Investigator Programme:** The Centre provides opportunities for meritorious post-PhD scholars to be mentored by RCB Faculty. The Centre invites young scientists from within India and outside in this region who are below the age of 35 years to work in the areas related (but not limited) to structural, systems and synthetic biology, tissue engineering, analysis of complex diseases for identification of intervention points and development of knowledge-based drug discovery strategies, under the mentorship of Faculty of Regional Centre for Biotechnology. Those likely to complete their PhD programme in the next 3 months are also eligible to apply. The Award shall be initially for the duration of three years and extendable by another two years. The award carries a consolidated stipend of Rs. 40,000/- per month. The awardees shall not be entitled to

draw any other fellowship or salary. Interested young scientists may apply against the specific advertisement that will appear from time to time

- 3. Master's Programme:** Clinical, pre-clinical and translational research forms the backbone of medical science. However, the focus still remains on understanding the human body, diseases and functional aspects covering patho-physiology, disease etiology and the like. These require understanding the basic biological principles on how human body works, diagnosing, curing and treating diseases and knowledge on how cells, organs and systems function in the human body. A Masters level programme in Medical Science is proposed that will address the exciting and dynamic areas of human immune-system and disease biology in a holistic manner.

To meet this objective RCB, has taken a lead in designing a Masters level degree programme in Medical Sciences. The framework of the programme has been designed with an objective to provide knowledge in life sciences with emphasis on human biology, clinical and translational research. The programme will be offered deriving expertise from within RCB as well as from other national institutions including National Institute of Immunology (NII), Translational Health Science and Technology Institute (THSTI), National Institute of Biomedical Genomics (NIBMG).

The overall aim of this course shall be to build the aspects of practical learning, debates and research skills for medical and related graduates that will enhance educational experience and contribute to personal growth with learning on life-long skills.

- 4. Training Programme:** RCB inducts post-graduate students of science from various universities/institutions/colleges of repute in research training programmes, to carry out their project work towards partial fulfilment of their post-graduate degrees. Selected candidates undergo training under the supervision of members of RCB faculty, learning to conduct their own research project in collaboration with other group members. Trainees get a realistic experience of several facets of conducting modern biological research and embarking on a research career. The training programme is

typically of six months duration, starting in January and July every year. A rolling advertisement is placed in the website for interested candidates to apply against.

5. **Workshops:** As part of its mandate, RCB conducts advanced workshops on several aspects of biotechnology and biomedicine. These workshops, typically a week-long, offer a combination of theoretical knowledge and hands-on experimental time in the appropriate area from experts in the field, drawn from both within and outside the faculty of RCB. In addition, distinguished expert faculty who have utilized the relevant technologies in their research deliver lectures, which emphasize the practical utility of the methods/ technologies being discussed have had in their own research careers. The workshops are typically targeted towards graduate (PhD) students and higher levels. Participants benefit from these workshops by broadening their horizons, getting exposure to new ways of addressing questions and exploiting the new technologies and approaches towards making vital advances in biology, biotechnology and biomedicine.

This list represents current courses offered by RCB, proposed ERP shall be capable and flexible enough to accommodate any new courses, centres or amend (modify/ close) any of existing processes.

RCB management wants to monitor following activities for above courses offered through multiple modes (campus/ satellite centres).

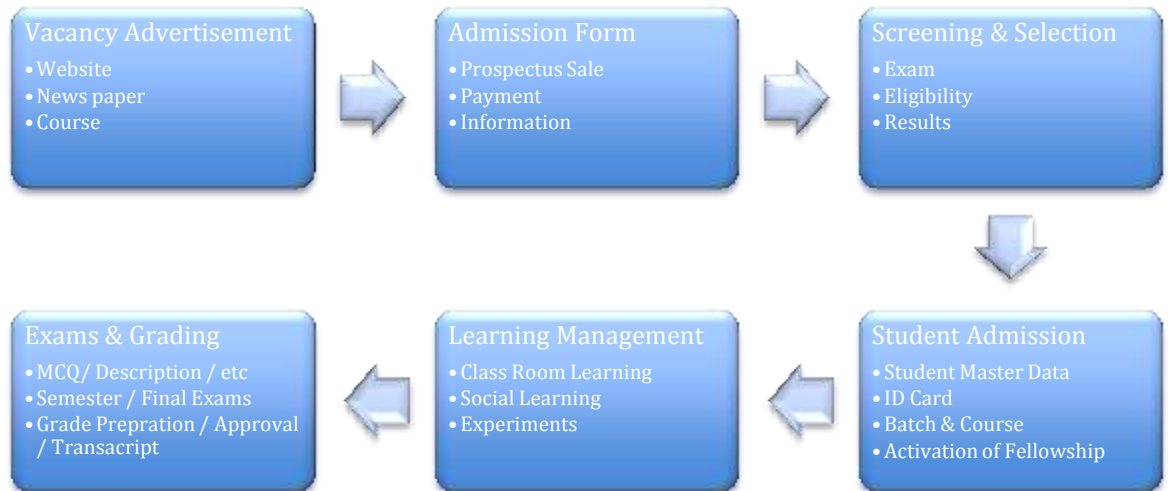
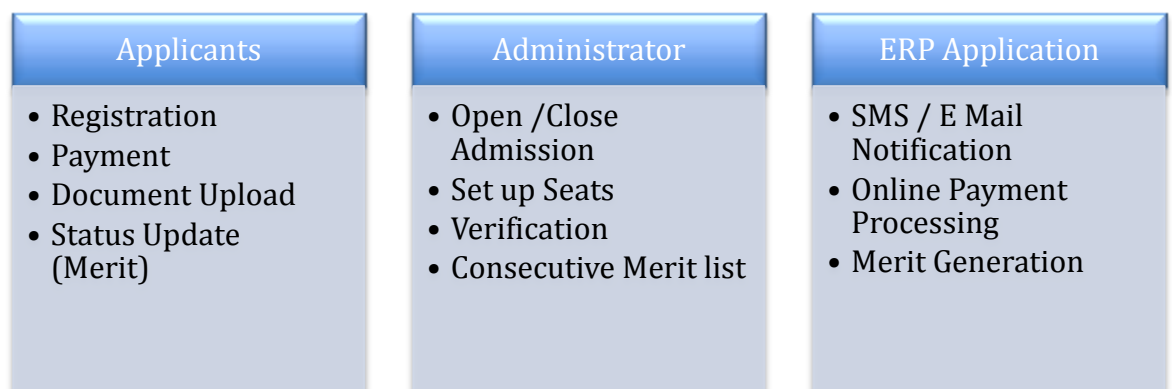


Figure 13 Key Academic Activities: RCB

- Admissions & Fee Management:** RCB management expects to announce a position / course at RCB or satellite centre through RCB website, integrated with proposed ERP. RCB team shall be able to keep a full record of pre admission inquiries, along with the details of all the students. It will help in optimizing the resources and decision making will become a lot easier while allotting the seats during the final admission process.

Following are key roles and expectations from admission module:-



Application & Pre-admission: RCB will sell admission forms/ prospectus through website advertisement and this data will be integration with proposed ERP. RCB will apply primary filter criteria for eligibility. In some cases there may be payment involved at the time of application submission. An aspiring student shall be able to buy an application form from RCB website and fill essential details for filing his candidature. Prospect student can capture his image through webcam and submit form.

- **Selection & Communication:** RCB selection committee will review all applications against eligibility criteria and rank all applicants based on selection criteria. Selection criteria may involve one or more than one type of assessment by RCB. Proposed ERP shall support digital evaluation criteria and selection of prospective students. RCB management will send communication to successful candidates through proposed ERP and upload results through RCB website or any other qualified interface.
- **Admissions:** Post acceptance of RCB offer, a prospective student shall be able to submit his dues, required documents and other information to RCB through website/ ERP integration. RCB team shall be able to create student login/ ID and other information through RCB portal / proposed ERP. Proposed ERP shall also allow RCB management to cancel any admissions based on request student or RCB recommendation.
- **Research Personnel:** RCB team will also advertise for research positions for fellow with grant under different schemes of young fellow schemes run at RCB. Typical duration can vary from 2 Years to 5 Years under such programs. Young research fellows are entitled for fixed salary and running expenses. A young fellow can also register online through RCB website and undergo assessment for admission at RCB. Young fellow will be attached to a particular research project and submit his deliverable.
- **Alumini Network: Alumni Database would required to be prepared for old students who pass out of RCB. There should be facility for Registration, Payment Gateway integration to receive contributions, for organising meets.**

Proposed ERP Solution shall provide a generic selection process, from an institute specific online admission application to the final selection of students for multiple streams/classes

offered by the institute. Institutes can define their own criterion at various stages of the shortlisting of applicants for different programs including opting for a particular payment gateway.

Proposed ERP shall allow reminding, collection and accounting of following type of Fee from students and be flexible to add a new fee / amend existing fee :-

- Tuition Fee / Hostel Fee / Exam Fee/ Application Fee /Transport Fee / Library Fee/ Concessions/ Penalty / Scholarships / Miscellaneous Fee

Fee can be paid through any financial instrument and Website / ERP shall accept payment from multiple payment instruments:-

- Cash / DD / Cheques / Card Payment (Debit Card / Credit Card) / Wallets / UPI
- **Faculty / Student Profile Management:** Student profile shall be securely maintained for his lifecycle through academic career with RCB. This will include student personal details, professional details, literatures, education background, researches and courses undertaken at RCB and grades. RCB shall be able to search and filter record of any particular student based on his skills, research or any other parameter from proposed ERP.

Similarly faculty details shall be also maintained through proposed ERP. RCB academics team shall be able to mark subject settings, course settings, back up faculty and skills through faculty profile management.

- **Course and Subject Management:** RCB management shall be able to structure the curriculum setup in accordance to the various Programs / Subject Streams offered, thereby providing capability to handle complex curriculums with ease. This module can be deployed for semester system, trimester system, or any other term system. This module shall help define following components :-
 - **Course Faculty** – Assign primary, secondary and back up faculty for a course. There are multiple duration and configuration courses available at RCB. A PhD program can take 5 years to complete while a diploma can be completed in one year by a student. Following are key courses available at RCB:-

- Diploma program – 1 Year
 - Master’s program – 2 Year
 - Doctoral program – 5 Year
 - Integrated program – 6 Year
 - More programs that may come in future.
- **Course Content** – Faculty / Admin shall be able to define syllabus, key topics and store course content for course. This feature shall integrate with existing DMS application of RCB.
 - **Course Evaluation** – Faculty shall be able to define question bank for each course. It could be expected that students undertakes one or more intermediary assessments during the course. Faculty shall be able to evaluate or update evaluation through proposed ERP application.
- **Timetable Management:** Like any other Education institute, time table is an essential part of academic activities at RCB. Timetable management system in any Academic Institute under current state requires more manual power, paperwork, and a time-consuming process too. In order to deal with the inadequacy, there was a transformation required in the system for better functioning of management. RCB team needs to deal with distribution of staff to classes, declaring an occasion, last minutes changes in time table through paperless administration with the better productivity of RCB.
 - **Time Table Generation:** Auto / Manual generation of time table through a user friendly interface with present data available in ERP Application. Time table shall avoid any conflicts, easy to amend, allow assigning substitute faculty, allow approval hierarchy and allow scheduling laboratory schedules, project work, extra classes and outdoor activities for a class. Proposed ERP shall send mail / SMS notifications (Daily/ Weekly/etc.) to stakeholders about Time table
 - **Resource Utilization:** Time table shall allow efficient utilization of following resources while meeting goals of academic curriculum :-

- Students
 - Faculty
 - Classrooms
 - Laboratories
 - Library etc.
- **Time Table Amendments:** RCB academic team shall have flexibility to amend timetable to accommodate any changes, emergencies through user friendly amendments and approval process in time table. Proposed ERP shall send mail/ SMS notifications to stakeholders for amendments so that any change is followed by RCB users.
 - **Lectures & Classes:** RCB academics team will create and maintain a batch of students for each course subject. This will require updating information like course duration, term, faculty, timings, important dates, important tasks, and syllabus. As course progresses, faculty will update progress and student activities, attendance for respective classes. Following are key activities for academics, faculty and students for this particular module :-
 - Subject & Course Management – Add / delete/ modify courses & subjects, manage academic sessions
 - Student Batch Management – Create / modify batches, create temporary batches.
 - Attendance Monitoring – Faculty will update attendance of students for each class, proposed ERP shall be flexible enough to accommodate attendance integration with biometric, ID card or any other compatible hardware for each class.
 - Faculty Feedback – Students shall be able to share feedback about faculty and his learning experience since students are supposed to be the most important stake holder of Higher Education System. RCB academics team is committed to provide quality higher Education and Institution needs to ensure that students have a voice at various decision making Process. Faculty Feedback & learning experience involves formulating learning

and teaching practices and the views of the Students are to be considered as the primary evidence on which RCB education and learning is evaluated.

- **Social Learning:** RCB team has realized that world is getting transformed into a social community and the more student and faculty interact the better will be learning experience and atmosphere at RCB. It is established that communities based on shared interest create stronger bonds which can help create complete personalities and drive collaboration around learning, work, hobbies and research. RCB expects through social learning will help monitor syllabus progress and takes teaching to a new level with online assignments and study material submission. Students can access and interact with these seamlessly via the Communication Portal. Proposed ERP helps institutes create a vibrant and dynamic environment in their campuses. The Students' Focused Portal provides networking features such as Forums, Blogs, Wikis, Message Boxes, Virtual Groups, etc., which initiates a seamless interaction between students and faculty members through a mobile campus. Proposed ERP shall facilitate inclusion of Bulletins, Alerts and RSS feeds generated by different functional modules of ERP or external links. All student data such as Student Profile, Timetable, Homework and Assignments, Examination Results, etc. can also be accessed via the Students' social Portal. There can be a separate dashboard for the Faculty and the Director/Principal under social portal.
- **Exam & Grades Management:** Proposed ERP shall be able to handle different evaluation processes adopted by various academic courses by RCB or satellite centres. This module provides flexibility in defining evaluation structure in terms of tests, assignments, tutorials, practical, projects and examinations of different Programs / Subject Streams. The faculty can maintain performance of students continuously using easy screens of ERP. RCB academic team can publish results online on the Communication Portal or e-mailed as and when desired. RCB can design internal certificate formats for different courses. Following are key components of Exam & Grading :-
 - **Question Bank & Evaluation:** Each faculty shall be able to create a question bank and this bank shall be used for creating evaluation exams. This feature will help RCB further automate, digitize and secure examination processes.

- **Grade Calculation & Result update:** RCB management can opt for online / offline examination based on applicability. Based on examination process evaluation criteria will be either online or offline however proposed ERP shall be capable to support both of the modes. Final results will be updated digitally by RCB academics team and digital results will be used for communication to all stakeholders.
- **Library Management:** RCB is already using a library management application (Libsys) and proposed ERP shall integrate with Library Management Application for access to Library application as SSO.

The library & e-library facility has been fully established with regular subscription of print and electronic versions of scientific journals. The access to a wide range of e-journals provided by the DBT Electronic Library Consortium (DELCON) is also available to all the users of the centre.

The centre is establishing a library with modern amenities to access information needed for advanced research in the specialized field. For the same RCB has implemented Library automation system by LIBSYS Ltd. offering solutions such as, RFID, Digital Resource Management System etc. About 400 books are being presently being managed through this.

An online public access catalog (often abbreviated as OPAC or simply library catalog) as an online database of materials held by RCB library is available. Users search this library catalog principally to locate books and other material available in the library.

Data migration would be required from Libsys into the Library Management System to be provided by the vendor, it could be any system like KOHA-open source library management system

- **External Integration:** RCB is already using a library management software and proposed ERP shall be capable to integrate with it.
- **Hard Copy Books / e Books:** Library at RCB involves access to journal websites through academic access.
- **Satellite Centers:** RCB shall operate satellite centers across INDIA and allow access to students for RCB courses and curriculum. Each satellite center will undergo an assessment on certain parameters every 5 years. RCB will monitor seats, students and grading at satellite centers

however day to day operations (classes, attendance, faculty, facilities etc.) will be monitored by satellite center by itself.

- **Affiliation Management:** RCB will review satellite affiliates and will maintain period of affiliation along other details of affiliate. An affiliation process will involve approval workflow and attaching supporting documents for affiliate. Proposed ERP shall also support logging of any review recommendations or cancellation of affiliation in between of affiliation duration.
- **Student Master Data:** Same as above
- **Exams & Grading :** Same as above

Project Management at RCB

RCB operates in a research project management business scenario and it is very important for RCB management to track and monitor all running, proposed projects. Any project follows a lifecycle represented in following diagram and RCB management expects to capture information for mentioned process :-

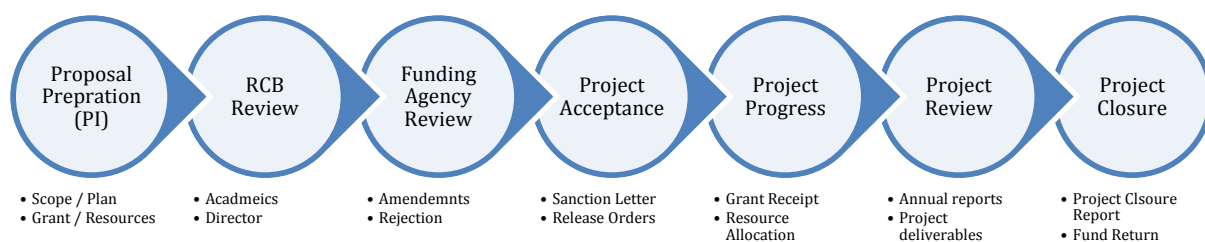


Figure 14 RCB Project Lifecycle

Proposal Preparation (PI): Project proposal drafting involves collating project level information by project principal investigator, this information includes following key details:-

- Project Scope and stakeholders
- Project Deliverables

- Project Plan
- Project Budget and Grant Required
- Funding Agency
- External stakeholders (Hospitals, Educational Institutes)

RCB may also opt to create an internal project for events like seminar, workshops, training etc.

PI can also append information in terms of technical document and other supporting files along project proposal. PI shall be able to print proposal in RCB prescribed format. There can be more than one format based on funding agency or nature of project.

RCB Review: RCB project approval committee, ad hoc experts and other competent authorities will review and provide their comments on projects submitted by PI. PI shall be able to view updated status of project and comments from approvers and resubmit project for approval post amendment. Proposed ERP shall send mail notifications to RCB users for prompt action on submissions.

Funding Agency Review: This review will be done offline and result will be updated in proposed ERP by authorized user. The grant approval and sanction letter will be uploaded onto the website.

Project Acceptance: Funding agency will notify to RCB through formal documents and these documents will be updated in proposed ERP by RCB users and used for future reference. RCB team will capture all project related identifiers with funding agency (file number, letter details etc.) at the time of project acceptance. It might be possible that proposal and acceptance vary w.r.t. schedule, deliverable, budget etc. Proposed ERP shall allow capturing this amendment at the time of project acceptance.

Project Progress: Project initiation involves assembling project team and getting project related resources available for principal investigator. During project activities project team may travel to different locations for project research purposes. Proposed ERP shall allow capturing of all project related expenses against a project by RCB associates (faculty, students etc.) and capture approval of expense by authorized users. This expense may fall under travel tickets, local transport, food, lodging, communication or other out of pocket expenses.

Project Review: RCB reviews project progress regularly and addresses any concerns /issues highlighted by project team during project execution and review. Project is also reviewed by Funding agency at regular frequency. RCB submits following information to funding agency at the time of project review:-

- Project Annual Report (project plan, status and deliverables)
- Annual UCSE Report

Project Closure: Project is closed post completion of project deliverables and project completion report is prepared and submitted to funding agency. Sometime RCB / THSTI can obtain no cost extensions on project to make up for project deliverable delays. Proposed ERP shall support preparation of project completion report (funding agency based format) in addition to other project completion formalities.

Facility Management

Facility Management functions is very much central to routine operations of THSTI/RCB. Facility Management functions facilitates and supports each stakeholder at THSTI/RCB starting from security gate to disposal of garbage and pest control. There is some overlap with procurement processes and visitor management processes at security gate. All service contract procurement functions involve review and approval as per processes laid down under GFR guidelines. THSTI/RCB has appointed an independent committee to review and supervise daily operations related to facilities management.

We have tried to provide details of facility services and scope in this document however this is possible that a new service / contract can be used at THSTI/RCB to suit a new requirement. THSTI/RCB expects this flexibility from proposed ERP.

Security Management: THSTI/RCB has outsourced security services and an annual service contract is awarded to a single selected vendor by THSTI/RCB administration team. This service contract is awarded via GFR compliant tendering process and this is detailed under operations process guide.

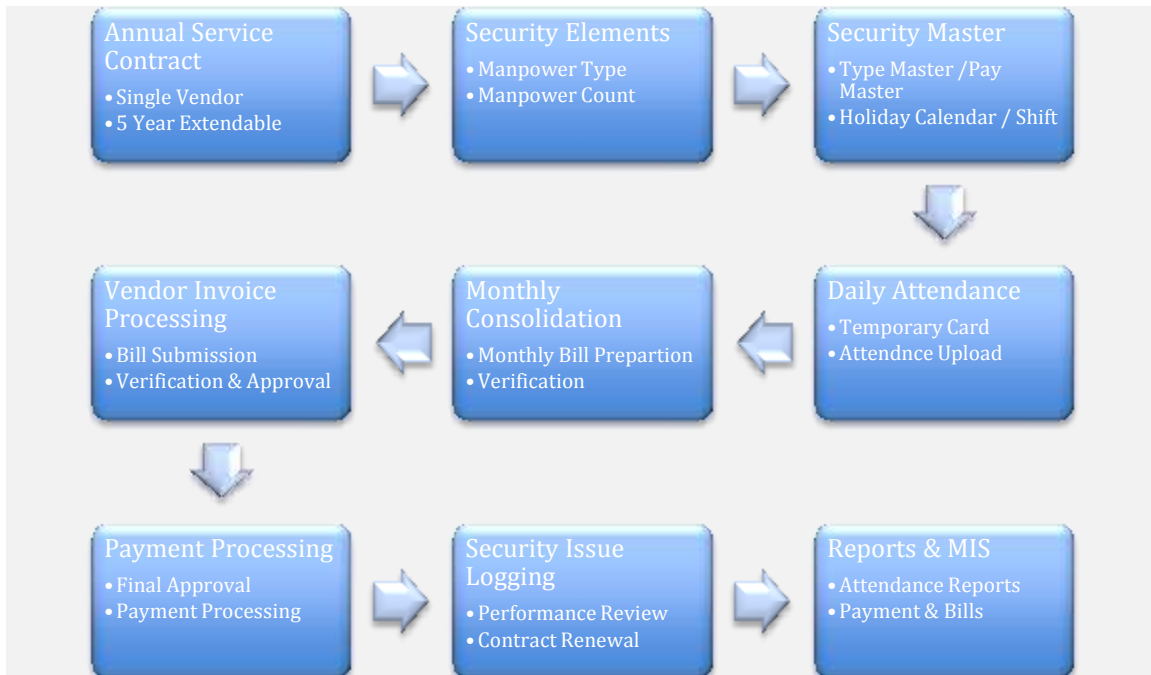


Figure 15 Security Management

Annual Service Contract: An annual service contract is awarded (as per GFR guidelines) to a qualified security vendor for providing all security services at THSTI/RCB. This contract can be extended up to 5 years under current rules and processes followed by THSTI/RCB.

Security Elements: Security services involves providing different type of man powers (Gunmen, Security Guard, Security Supervisors) working across 3 shifts of 8 hour at THSTI/RCB. Holiday calendar and other ad hoc arrangements are already defined in tender. Proposed ERP application shall allow defining security elements in ERP application and draw reports to users at different point of times.

Security Master: Security Master allows THSTI/RCB team to capture details of security type personnel details and define pay structure for security personnel's. Associates falling in this category are eligible for increments as per THSTI/RCB rules. THSTI/RCB team also wants to register daily attendance of security team through bio metric / temporary card swapping based on application of tool.

Daily Attendance: Security staff will attend duty based on shift and manpower defined and this attendance will be tracked by biometric or temporary cards into proposed ERP application.

Monthly Consolidation: Based on monthly attendance, monthly data will be collated and monthly security bill be generated through proposed ERP application. This bill will contain details of daily security staff details and monthly summary for reference purpose.

Vendor Invoice Processing: Security Vendor also submits a hard copy invoice to THSTI & RCB for payment purpose. THSTI & RCB have engaged independent security supervisors for verification of vendor invoice and overall security services. This team can refer invoice copy submitted by vendor and check against monthly computation by security vendor. THSTI is planning to initiate invoice approval process in ERP.

Payment processing: Security supervisor vetted invoice is verified by finance and payment is processed based after ED approval on projects and other cost centres selected for the purpose. All payments are approved by ED (Contingency funds < INR25, 000/- can be approved by Admin Head)

Security Issue Logging: THSTI & RCB expect a log sheet to record and register security related issues in running monthly sheet. This will help THSTI team and vendor to understand and address security related concerns.

Reports & MIS: THSTI & RCB team will need reports about monthly security personnel present, issues faced by THSTI team and allocation of security staff across site.

Housekeeping Management: Housekeeping Management covers hygiene related regular work at THSTI/RCB campus and hostel facilities. Housekeeping activities cover mainly two service components:-

Man Power Services

Consumables – Following are key types of consumables used at THSTI/RCB:-

R1 - This type of consumables are used for WC/Urinals cleaning.

R2 - This type of consumables are used for hard surface like table glass cleaning.

R3 - This type of consumables are used for transparent glass cleaning.

R5 - This type of consumables are used for furniture cleaning.

R6 - This type of consumables are used as Air fresheners.

D7 - This type of consumables are used as steel polish.

R9 - This type of consumables are used as Hand Water cleaner.

Housekeeping contract does not cover all consumables and certain consumables like tissue roll etc. are procured and managed by THSTI & RCB team. This scope of consumables can alter in future based on THSTI & RCB need and proposed ERP shall be flexible to capture and service this need.

Annual Service Contract: Housekeeping services (manpower as well as consumables) are covered under same service contract as mentioned above (Manpower and consumables). An annual service contract is awarded (as per GFR guidelines) to a qualified Housekeeping vendor for providing all Housekeeping manpower services at THSTI/RCB. This contract can be extended up to 5 years under current rules and processes followed by THSTI.

Housekeeping Master: Housekeeping Master allows THSTI & RCB team to capture details of Housekeeping type personnel details and define pay structure for Housekeeping personnel's. Associates falling in this category are eligible for increments as per Govt. of India rules. THSTI & RCB team also wants to register daily attendance of Housekeeping team through bio metric / temporary card swapping based on application of tool.

THSTI admin team shall have flexibility to record quantity of monthly record of housekeeping consumables. This inventory is managed and used by housekeeping vendor.

Daily Services: Housekeeping staff will attend duty based on shift and manpower defined and this attendance will be tracked by biometric or temporary cards into proposed ERP application. Consumables are also issued on a daily basis to Housekeeping team for maintaining services. Some of the consumable are managed and procured by THSTI & RCB team and these consumables are issued to vendor by THSTI & RCB admin team.

Monthly Consolidation: Based on monthly attendance, monthly data will be collated and monthly Housekeeping bill be generated through proposed ERP application. This bill will contain details of daily Housekeeping staff details and monthly summary for reference purpose.

Vendor Invoice Processing: Housekeeping vendor submits a hard copy invoice (manpower as well as consumables) to THSTI & RCB admin team for payment purpose. THSTI & RCB have engaged

independent supervisors for vetting of vendor invoice. This team can refer invoice copy submitted by vendor and check against monthly computation for attendance as per monthly attendance data available in ERP. THSTI RCB are planning to initiate invoice approval process in proposed ERP.

Payment processing: A vetted invoice is approved and verified by finance and payment is processed based on ED approval under projects and other cost centres selected for the purpose. All payments are approved by ED (Contingency funds < INR25, 000/- can be approved by Admin Head)

Housekeeping Issue Logging: THSTI & RCB expect a log sheet to record and register Housekeeping related issues in running monthly sheet. This will help THSTI & RCB team and vendor to understand and address Housekeeping related concerns.

Reports & MIS: THSTI & RCB team will need reports about monthly Housekeeping personnel present, issues faced by THSTI team and allocation of Housekeeping staff across site. THSTI & RCB will also need reports on Housekeeping consumables used by THSTI & RCB.



Figure 16 Hygiene Management

Pest Control Services Management: Pest control services of different types are covered through a service contract for THSTI & RCB campus and other facilities like Hostel etc.

Annual Pest Control Service Contract: An annual service contract is awarded (as per GFR guidelines) to a qualified pest control service vendor for providing all pest control services at THSTI & RCB. This contract can be extended year on year basis under current rules and processes followed by THST & RCBI. Pest control services have elements like different type of pest control treatments, defined frequencies and areas and sections of THSTI & RCB.

Visit Tracking: Pest control service provider visits THSTI based on agreed schedule or to attend an ad hoc call. His visits will be tracked through visitor management module and this data will be further used for verification of monthly invoices.

Pest Control Observations / Issue Logging: THSTI & RCB expect a log sheet to record and register pest control related issues in running monthly sheet. This will help THSTI & RCB team and vendor to

RFP for ERP solution at THSTI and RCB

understand and address pest control related concerns. This digital sheet will also have an entry for all pest control visits and treatment verification by appointed auditor.

Vendor Invoice Processing: Pest Control vendor submits a hard copy invoice to THSTI & RCB for payment purposes. THSTI & RCB have engaged independent supervisors for verification of pest control invoice. This team can refer invoice copy submitted by vendor and check against monthly visits sheet through visitor management system. THSTI is planning to initiate invoice approval process in ERP.

Payment processing: A vetted invoice is verified by finance and payment is processed based on projects and other cost centres selected for the purpose. All payments are approved by ED (Contingency funds < INR25, 000/- can be approved by Admin Head)

Reports & MIS: THSTI & RCB team will need reports about monthly pest control visits, issues faced by THSTI & RCB team across site.

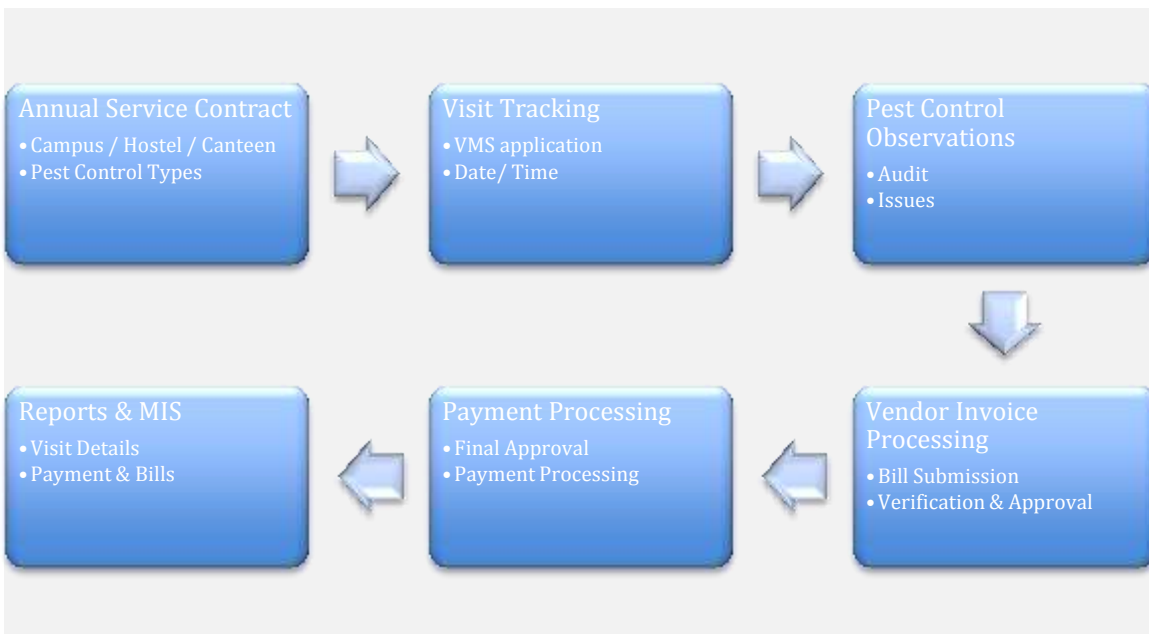
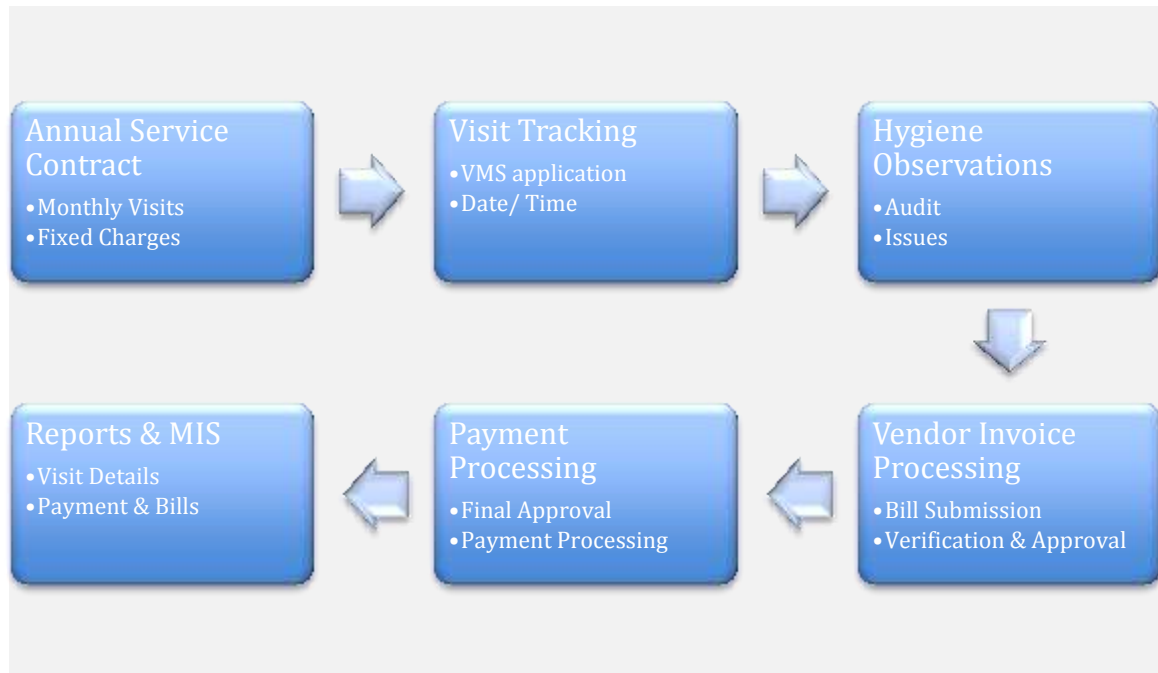


Figure 17 Pest Control Services

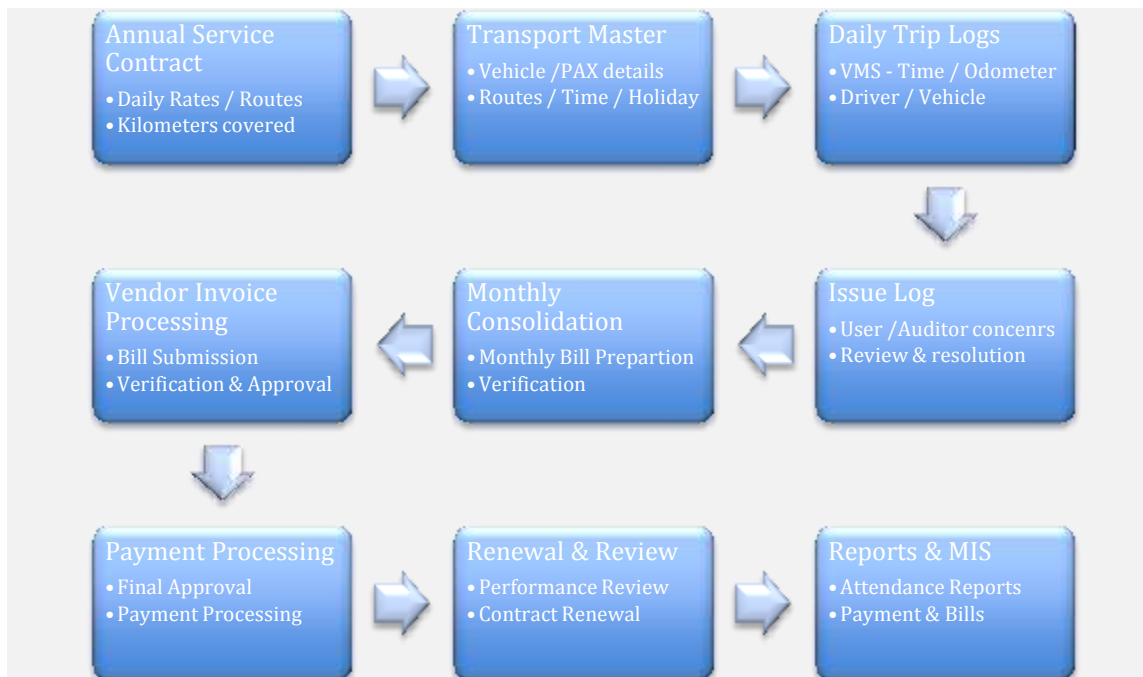
Solid Waste



Management: These services are very much similar in nature to pest control services like there is a minimum visit commitment from vendor and service levels (Waste Area) is daily monitored by THSTI & RCB team.

Transport Management: THSTI & RCB are located outside city location and does provide transport facilities to its faculty, staff and other stake holders. Transport services are sub divided into two main parts based on nature of services and service life cycle.

Daily Trips Management: - these types of services are covered by daily bus service provided to employees, faculty and student for commuting to and from THSTI & RCB. THSTI & RCB conduct vendor selection process through annual bidding process for different types of buses (27 seater / 40 seater / 54 seater) based on route strength. There is an assured running for vendor based on route and provision for additional per kilometre mileage to service provider.



Annual Service Contract: An annual service contract is awarded (as per GFR guidelines) to a qualified transport vendor for providing all transport services at THSTI & RCB. This contract can be extended up to 5 years under current rules and processes followed by THSTI & RCB. This contract covers routes, daily assured kilometre, and type of buses, time details and kilometre rate for busses / other statutory clauses for vendor.

Transport Master: This master covers details of different routes, passengers, time in and out from THSTI and selected bus details (bus type, driver details etc.). This master does also contain information on transport calendar like holidays etc.

Daily Trips: Daily trips are tracked through VMS application at THSTI security and manual records/proposed VMS application at RCB. Security team also records odometer readings of bus at the time of in / Out for recording kilometre details of bus as a reference. THSTI & RCB expect to capture Time/ Date/ Vehicle Type/ Route / Registration Number / Driver details at gate (ERP shall be flexible to modify this list of fields based on future business needs)

Transport Issue Logging: THSTI & RCB expect a log sheet to record and register transport related issues in running monthly sheet. This will help THSTI & RCB team and vendor to understand and address transport related concerns.

Monthly Consolidation: Based on monthly performance of transporter, monthly data will be collated and monthly tentative transport bill be generated through proposed ERP application.

Vendor Invoice Processing: Transport vendor also submits a hard copy invoice to THSTI & RCB for payment purpose. THSTI & RCB have engaged independent supervisors for verification of pest control invoice THSTI & RCB are planning to initiate invoice approval process in ERP based on ERP calculated amount, vendor invoice amount, reason for difference in a detailed sheet. This team can refer invoice copy submitted by vendor and check against monthly computation by vendor.

Payment processing: A vetted invoice is verified by finance and payment is processed based on projects and other cost centres selected for the purpose. All payments are approved by ED (Contingency funds < INR25, 000/- can be approved by Admin Head)

Reports & MIS: THSTI & RCB team will need reports about monthly transport trips, on time performance, issues faced by THSTI & RCB team.

Ad Hoc Taxi Management: THSTI & RCB employees, faculty, students and guests also access ad hoc taxi services provided through an external party contract. This service contract is also awarded to a suitable vendor through a GFR compliance tender process. This contract covers multiple types of taxis and charges (full day, half day, per kilometre rates)

Annual Service Contract: An annual service contract is awarded (as per GFR guidelines) to a qualified transport vendor for providing all transport services at THSTI & RCB. This contract can be extended up to 3 years under current rules and processes followed by THSTI & RCB. This contract covers type of taxis, rate contracts (multiple modes) and other statutory clauses for vendor.

Vehicle Master: This master covers details of vehicle types, day / night rates, kilometres and selected vehicle master details (vehicle type, registration number, driver details, seating capacity etc.). This master does also contain information on transport calendar like holidays etc.

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Routes Master: This master covers details of high frequency routes, standard rates, duration for the purpose of standardization of request booking and processing.

Vehicle Request: An ad hoc transport request is initiated by an authorized user of THSTI & RCB with details of Origin/ Destination/ Time / Date / Passengers / Purpose of travel / Project details for approval by authorized users. It is expected that a request is submitted with sufficient time for admin user to arrange a taxi. An approved request is assigned to travel admin for vehicle assignment. There can be some amendments/ cancellations in vehicle request based on rules defined by THSTI & RCB admin team. It is expected that mail notifications will be sent to designated users for intimation about request status updates.

Request Processing: Request processing involves vehicle assignment for a particular request. Admin team can club some vehicle request and assign same vehicle for more than travel requests based on feasibility. It is expected that proposed ERP will enable admin team achieve objective of optimizing resource utilization.

Trip Details: At the time of travels originating from THSTI & RCB travel, Security team will update vehicle reporting through VMS application. Security team will update details of vehicle type/ vehicle details / passenger/ time out/ odometer details for reference. After trip completion origin user shall update and close travel request, there should be a provision to close past travel request through some default rule. User can also record an issue/ concern related to his trip feedback or through travel issue sheet.



Figure 18 Ad Hoc Taxi Management

Monthly Consolidation: Based on monthly performance of transporter, monthly data will be collated and monthly tentative transport bill be generated through proposed ERP application. These details will be used for verification purpose by travel admin against vendor invoice

Vendor Invoice Processing: Transport vendor also submits a hard copy invoice to THSTI for payment purpose. THSTI team will verify and reconcile vendor invoice through a monthly review sheet of all requests and update gaps / reason for gaps. This reconciliation sheet will undergo internal approval by THSTI management through proposed ERP. THSTI is planning to initiate invoice approval process in ERP based on ERP calculated amount, vendor invoice amount, reason for difference in a detailed sheet. This team can refer invoice copy submitted by vendor and check against monthly computation by vendor.

Payment processing: A vetted invoice is verified by finance and payment is processed based on projects and other cost centres selected for the purpose. All payments are approved by ED (Contingency funds < INR25, 000/- can be approved by Admin Head)

Reports & MIS: THSTI team will need reports about monthly transport trips, on time performance, issues faced by THSTI team.

SAF (Small Animal Facility): This facility is being run in a separate building under THSTI and in future it is expected to run on a cost recovery model.

ATPC (Advance Technology Platform Center): Technology Platform Management which would include time sharing management, cost analysis for operating and maintenance to work out a cost recovery model would be required for ATPC, with a Bio-incubator facility. This would be used by 30-35 incubatees at one time.

Rest of the building would be housing about 20 technicians/scientific staff and about 15 administrative staff.

This facility would initially work under RCB during the next 2-3 years and slowly become independent. This would function in a cost recovery mode. Thus the modules required here would be Service management and cost recovery. Also various other facilities would be there like patent and Royalty monitoring.

Hostel Management – THSTI & RCB each operate a hostel for resident students and this hostel has 30 double sharing rooms, 20 double sharing rooms for girls and 10 double sharing rooms for boys. THSTI & RCB expect to manage hostel occupancy and vacation through ERP application under following steps:-

Hostel Master: Hostel Master includes details of Hostel, room types, allotment rules, security money, refund rules, approval hierarchy and other information related to Hostel.

Hostel Admission Request: An authorized user shall be able to submit a request for Hostel with details of student, room type, duration and other details. A mail notification can be sent to originator and other stakeholders of hostel request and approval hierarchy.

Request Processing: This request is first approved by hostel admin team and other approvers. Based on hotel status request may be put on hold or hostel room can be allocated to student. Student has to deposit caution money to Finance team before getting room allocated to him.

Monthly Expense Deductions: There are monthly charges of Hostel room and these charges shall be borne by student. THSTI & RCB expect that finance team be able to recover monthly expenses based on prevailing rate from particular student.

Hostel Vacation Request: At the end of tenure duration, student shall be able to submit a hostel vacation request based on notice period rule of hostel.

Request Processing: This request shall be allocated to hostel authorities and after approval finance team shall refund caution money to student.

Reports & MIS: Hostel admin team would need reports on occupancy status of hostel at any point of time.

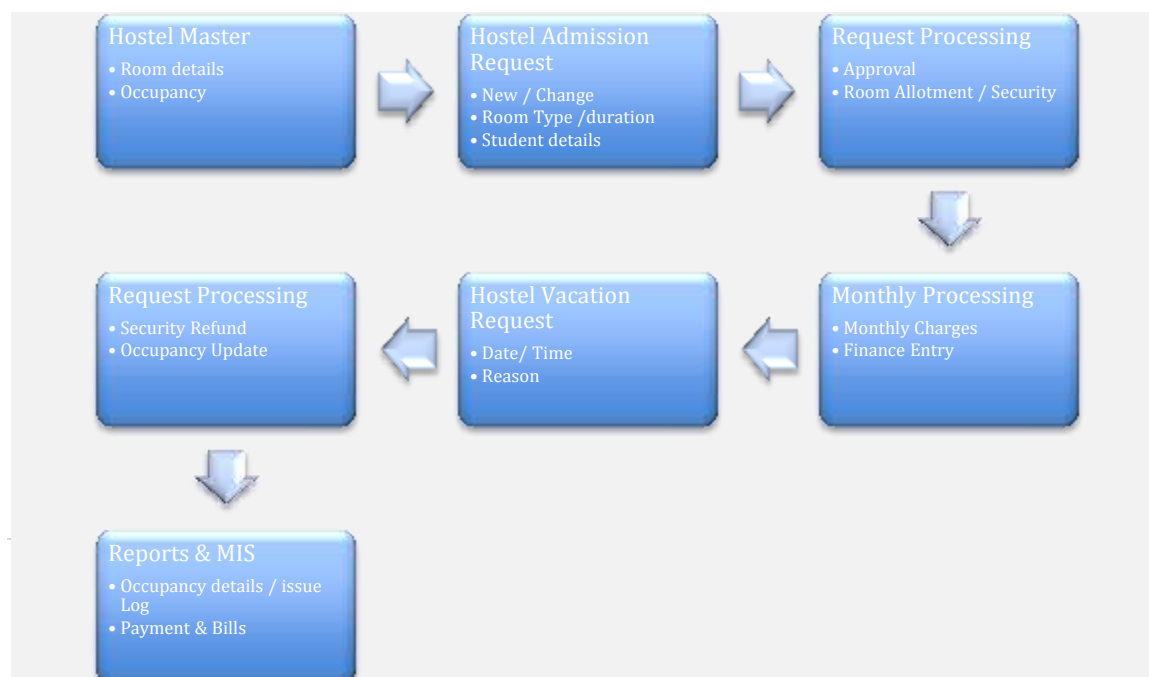


Figure 19 Hostel Management

Auditorium Management and Cafeteria Management – Currently auditorium and cafeteria are being managed manually. The auditorium booking from RCB is currently being done by THSTI’s internal online portal.

Front Office Management (incl. visitor management & courier/dak management) - Both THSTI and RCB have around 50-100 number of visitors including vendors, foreign delegates etc. It is desired by the management that the ERP system should be able to keep the relevant details of these visitors. RCB is currently using dak management system for managing the couriers and posts. In future, the courier management facility is also being sought through this ERP solution.

Report & MIS

THSTI & RCB User Group	Reports & MIS
Procurement	Purchase order register (all type of items, vendors)
	Payment register
	Register for Advance Payments
	Register for Part Payments
	Pending deliveries report
	Project expenditure report
	Asset history card
	Purchase, maintenance & disposal details
	Asset register
	Goods receipt register
	Goods Issue register
	Disposal register (GFR-10)
Disposal sale register (GFR-11)	

THSTI & RCB User Group	Reports & MIS
	<p>Annual fixed asset verification report</p> <p>Annual consumable verification report</p> <p>Annual procurement plan</p> <p>Registered vendor, approved categories list</p> <p>Debarred vendor / Blacklist vendor list</p> <p>EMD Register</p> <p>Performance Security Register</p> <p>Inventory Balance Report (Location wise (with batch details) inventory balance report across THSTI/RCB)</p> <p>Inventory Transactions Report (Inventory transactions ledger report for a period (filter criteria)</p> <p>Inventory Search Report (Find an Item / Batch / Make)</p>
Finance	<p>THSTI/RCB finance team expects key reports related to projects and finances through proposed ERP application in addition to standard ledger reports/ income statement/ balance sheet.</p> <p>Project Financial Details (Budget, sanction, release, receipts & expenses)</p> <p>Annual Project Performance Report</p> <p>Project financial status summary</p> <p>Sanction Order Report</p> <p>Release Order Report</p> <p>Project Expense Report</p>

THSTI & RCB User Group	Reports & MIS
	<p>Project Closure Report</p> <p>Assets certificate formats as per DBT</p> <p>Balance sheet</p> <p>Budgeting of expenses</p> <p>FEMA Declaration</p> <p>Form – A1</p> <p>HDFC/SBI – FP for service</p> <p>HDFC/SBI Bank – Advance for payment</p> <p>HDFC/SBI Bank – FP more than USD 500 / Less than 500</p> <p>ICICI Bank/SBI Bank – FP for Import goods</p> <p>ICICI Bank/SBI Bank – FP for Services</p> <p>LC Amendment</p> <p>Manpower statement format</p> <p>PNB/SBI Bank– LC Draft</p> <p>Receipt and Payment Account</p> <p>SOE payment for DBT</p> <p>UC format for DBT</p> <p>Trial Balance / Ledger statements / Party statements</p>
<p>Engineering Services (Electrical & Allied, Civil &</p>	<p>THSTI/RCB team will need reports about Job Indent Register, Work order Register, Delay Report/ Indent Ageing/ Work Order Status.</p>

THSTI & RCB User Group	Reports & MIS
IT services)	
Facility Management	Security attendance register, housekeeping staff attendance register, vehicle movement register, pest control visit register, hostel register, guest house register, ATPC register, SAF management register.
Human Resources	THSTI/RCB shall require various reports like project wise, location wise sanctioned post, filled & vacancies, location wise manpower positions, location wise manpower cost, reports on employee types & so on.
Academics	Batch Report Student Attendance Report Batch Grade Report Student Grade Report Student Transcript Faculty Wise Grade Report Daily / Weekly/ Monthly Fee Collection Outstanding Fee Report Admission Enquiry Report Admission selection Report Subject wise grade report Project completion report UCSE Report

THSTI & RCB User Group	Reports & MIS
	Project Annual Report

PART G: Scope of Work (SoW)

1. Scope of Supply

The specific activities envisaged to be delivered as part of the scope of work for the project are briefed, but not limited to, under **Business Requirements (Section 2 of PART B)** and Detailed under **PART F: BoQ and Process Specification** section for Supply, Customization, Installation, Integration, Implementation, Testing, Training and Maintenance of ERP system at THSTI and RCB, NCR-BSC campus, Faridabad. There will be a detailed blue print preparation and sign off with bidder post award of contract.

1. System Study involving Business Process Review (BPR) of the existing processes and the tools/applications being used in the same.
2. Project Plan for the ERP implementation.
3. Supply of ERP application software along with the COTS Source Code.
4. Implementation including customization/development to ERP modules that may be required.
5. Data Migration and Integration of ERP with the existing databases and applications.
6. Training to THSTI and RCB employees on the ERP features and functionalities.
7. Documentation.
8. ERP hosting at THSTI & RCB.
9. ERP deployment and going 'Live'.
10. Maintenance during ERP stabilization period.
11. Long-term maintenance of the ERP solution

12. Application access / Data security / other security elements related features as per detailed requirements and specifications set by THSTI and RCB.

2. Functional Requirements

ERP Application Development and Hosting at THSTI & RCB premise should address following functional requirements:-

1. The solution should be customized to capture all information required by all the stakeholders.
2. The solution should provide for Addition, Edit and Update for all Records as well as user privileges for the administrator.
3. The solution will be able to conduct Validation, Editing, Storing, Profiling, Reporting etc. from the database.
4. The solution should be able to guard against malicious user input, SQL Injection, session fixation and unauthorized database access.
5. The System should have robust authenticated role based architecture that can be configured as per user requirement.
6. Expansion of the solution should be easily maintainable through plug-ins with authorization of physical and logical movement of electronic information.
7. The system should provide monitoring tools with Dashboard facility for higher level supervision at client end.
8. The solution should provide for SMS and Email Notifications as required by end client to each of the stakeholders at various predetermined stages.
9. The solution should provide for creating MIS reports for the various stake holders.
10. The solutions should have capability for enabling authenticated User Access for approved Users based on Admin Rights and privileges.

11. The solution should be designed to ensure confidentiality and security of all Data all through the process.
12. The solution should have Online Documentation, On-line help, Field-level help, Screen-level help etc.
13. The solution should have single sign-on access across applications and should be intuitive, with easy-to-use user interface that can be accessed via the web interface.
14. The solution should provide performance statistics for the CPU/ Memory, database, Application servers.
15. The solution should have ability to:
 - a. Support configurable Password policies
 - b. Support TCP/IP, HTTPS, HTTP
 - c. Provide automatic time out for entry transaction
 - d. Configure the number of permissible application log-in attempts
 - e. Support role based access control
16. The solution should be web enabled with role based access control for all the internal and external and stakeholders to use it from intranet and internet. Users and administrators should be able to access the system with any leading web browsers like Internet Explorer, Firefox, and Chrome etc.
17. The solution should come with inbuilt tools for data migration, upgrades etc.
18. The system will display the list of users and allow each user to be assigned roles, privileges as well as alter or revoke them.
19. The system will allow the system administrator to reset passwords, in which case the user will be automatically notified using email of this fact and the user will be asked to log in to the system within a specified period after which a new password request will need to be made by the user.

20. The system will allow the system administrator to maintain a list of privileges and assign, alter or revoke rights that may be view, add/create, edit/alter/update, delete/remove/archive to each form control of every user interface.
21. The system should provide facility so that; Passwords will be changed every 90 days (or other period). The systems will enforce password change with an automatic expiration and prevent repeated or reused passwords. The system administrator shall have the power to set exceptions for this.
22. The system should provide facility so that; On allocation for the first time as well as reset of password by the system administrator for lost passwords, the user will be forced to change the password
23. The system should provide facility so that; Passwords must be stored in encrypted forms by the system and these cannot be retrieved by the system administrator who may only reset the password.
24. The Solution should provide integrated document management system.
25. Document management system should be able to store documents related to transactions and should allow viewing document without requiring any external tool.
26. Integration Capabilities

ERP integrates seamlessly into your existing infrastructure. This allows for full implementation with minimal disruption to business operations. Once implemented, ERP offers a single, intuitive portal through which businesses can perform tasks, analyze data, generate reports and integrate new applications easily. Ultimately, ERP's integration ensures that staff will be able to use the system quickly and effectively.

- Module Integration
- Hardware Integration
- Application and Software Integration
- Integration with Handheld Mobile Devices
- Integration with portable scanners
- Integration with fax server
- Integration with barcode generator

3. Security Principles

1. The system must follow a role based access control at all levels
2. The system must support extensive logging at all levels and associated tools for audit and quick alerting in case of unforeseen malicious access.
3. All data on the Online Portal & ERP must be secured and there should be no direct access to it other than through well designed, secure & well-established protocols.
4. Data privacy will be given appropriate emphasis with commensurate liability and indemnity provisions. All the hardware assets must also be secured throughout their life cycle as they may contain sensitive data.

4. Application Security Principles

1. Establish secure defaults: By default, the experience should be secure, and it should be up to the user to reduce their security – if they are allowed. All the passwords or login details or financial transaction related information shall not be transferred to or from the server in plain text. SSL 128 bit encryption method can be adopted to secure such details.
2. Security and Access Management Layer: Access management and security are the critical components of the solution architecture. Single Sign-On (SSO) and Role based access are achieved through the identity assertion, credential management and directory services components.
3. All types of network attacks which were made possible due to any reported vulnerability found in the software/technology used by the bidder must be identified and counter measures must be put in place free of charge. If required, any update or changes made in the source code of the product will also be treated as free of charge updates and should be covered under the warranty clause.
4. All THSTI and RCB data should reside within a specific THSTI and RCB infrastructure developed for the purpose.

5. Management Principles

1. The management of system shall be SLA (Service Level Agreement) based.
2. System Management shall follow all processes as per to Information Technology Infrastructure Library (ITIL) standards. This includes Asset Management, Vendor Management, Configuration Management, Incident Management, Performance Management and Capacity Management.
3. Change Management should be automated to the maximum possible extent.
4. Real-time status of the system performance should be available at all times to system administrator desk.
5. System Management should intelligently perform root-cause analysis to rapidly bring the system back to normal working conditions.
6. It should be possible to proactively manage all the system hardware and software components maintenance and licenses throughout their life cycle.
7. All the requisite license for entire components needed for ERP deployment and maintenance would be provided by the vendor.

6. Scope of Acceptance testing and commissioning

The bidder shall provide standard functionality test suites for testing the modules. For software the bidder shall prepare the test plan and shall get it approved by THSTI and RCB. Test Data for different scenario (Test Cases) will be prepared in consultation with the users concerned for testing the modules. The pre-commissioning tests shall be carried out to assess the following but not limited to:

- a. Conformance to the functional requirements,
- b. Performance of the system with reference to response time and accuracy,
- c. User friendliness.
- d. Simultaneously, the documentation will also be reviewed by the user to ensure its accuracy and clarity.

The System Integrator should after development and customization/configuration of the COTS Solution, conduct tests to demonstrate that the system meets all the requirements (functional and technical) specifications as brought out in this RFP and would be in accordance with the procedures detailed in approved To-Be process document.

In the event, the test parameters, commitments are not submitted or not accepted explicitly in writing/minutes by THSTI & RCB, the Test parameters, commitments etc. as decided by THSTI & RCB will be final and binding.

7. Scope of Training

The purpose of end user training is to ensure that all end users are adequately prepared and able to perform their job functions at “usage ready”. Training content will depend on the function performed by the end-user; therefore several user profiles will be established.

Furthermore the overall scope of training encompasses the following:

- a) Training all the users.
- b) Preparation of user manuals and training manuals.
- c) Documentation of processes.
- d) Training the key executives for monitoring the performance and using the reports effectively.
- e) Training of THSTI and RCB core team on selected ERP solution developmental aspects.

8. Scope of Warrantee and AMC period

A total of 3(Three) Years of warrantee, starting from the work order completion, and a 4th and 5th year AMC is being sought in this RFP. During AMC and warrantee period, without any additional cost, the following services are being sought. The terms and conditions mentioned earlier at the *Point 12-Warranty Clause, PART E- General and Special Tender Conditions* are also applicable and lie under the scope of warrantee and AMC period.

1. Help desk operations - Initial Response, Immediate telephonic response and support for usage related and other minor problems. Dial-in support for handling, minor bug fix.
2. Update the application from existing functional view point as and when required.
3. Onsite support for the initial 6 (Six) months of the warrantee period - On-site support for hand holding the users, database recovery and data synchronization after crash, performance tuning, bug fix, update for all critical functions. During these 6 (six) months of warranty period, the bidder will have to depute at least two engineers for troubleshooting, service support and site coordination. The engineers so deputed will have to remain necessarily at site during the working hours of THSTI & RCB and will be responsible for smooth functioning of the Client & server software. The bidder has to comply with the existing labour laws as amended from time to time.
4. Operational Support – On-site/Off-site/Online operational support after implementation.
5. OEM support – Ensuring the ERP Solution OEM services for system performance, performance tuning, upgrades etc.
6. Documentation - Upgrade the Documentation system on any new releases and provide any updates of technical and functional manuals.
7. Provide support to THSTI and RCB to install and commission the hardware and the ERP at their own data centers separately.

PART- H: Evaluation and Format of Technical bid

ATTACHMENT #1

Detailed Technical Proposal meeting the bid requirements covering detailed specifications should include

- I. Brand name, Make and version of items and sub-items quoted.
- II. Detailed Description of Technical specifications.
- III. Detailed brochure with specifications for the offered items.
- IV. Relevant test certificates/performance certificate/End-user acceptance certificate of the offered components/ systems/ Security related certificates

ATTACHMENT # 2

Any proposed deliverable/ functional aspects/ technical aspects/ terms/ conditions or any other item NOT IN compliance to tender Requirement

Sl. No	Section/ Page	Sl. No. as in	Requirement as specified	Deviation	Remarks/ Reasons /Alternatives
1					
2					

ATTACHMENT # 3

Detailed Project Schedule with timelines and resource allocation table.

ATTACHMENT # 4

Financial Bid with value/price information masked. Make, version , quantity etc. of each of the line item with sub-items indicated. The financial bid should strictly be in the Financial Bid Format as mentioned in *PART J* of this document.

ATTACHMENT # 5

Facilities sought from THSTI & RCB

ATTACHMENT # 6

Milestone v/s Timeline chart (Annexure ___) Milestone	Key Activity	Deliverable Linked to Milestone	Timeline in months - Vendor proposal (T = Start date)
M0	Business Process Review (BPR) of the existing processes and the tools/applications being used in the same	ERP Initial Assessment Report	
M1	Project Plan for the ERP implementation, maintenance, integration, training and data migration	ERP Project Plan	
M2	THSTI & RCB Portal development	Portal Sign off	
M3	ERP implementation/ customization along with integration with existing databases and applications and data migration wherever mandated	UAT Sign-off on the Integration	
M4	ERP hosting at THSTI & RCB	Hosting test report	
M5	ERP training and hand-holding to TC Functions	Employee feedback/ department sign-off	
M6	ERP maintenance during stabilization Period	Maintenance report on critical quality parameters	

ATTACHMENT # 7

Any other relevant matter.

ATTACHMENT # 8

Bidder has to submit the self-assessment for the fitment of each module with one of the

following response: Standard, Work Around, Customization, Third Party, Not Possible.
 Relevant marking criteria is described in the *PART I, Evaluation Criteria of the Bids*.

Module No.	Module Name	Response S/W/C/T/N
1	Finance	
2	Procurement	
3	Human Resources	
4	General Administration	
5	Academics.	

ATTACHMENT # 9

Bidder is to provide the relevant information about the Project Manager, Team Leaders and other technical manpower who will hold important responsibility during the implementation of ERP. The information provided here will be used to provide the technical marks.

S.No.	Name	Designation	Proposed responsibility and role in ERP	Relevant Certification (If any)	Years of Relevant Experience	Resume Attached Y/N
1		Project Manager				
2		Team Leader of Consultants / Developers				
3		Team Leader of Functional Consultants & Technical				

		Resource				
4		Process consultant for Finance				
5		Process consultant for Procurement				
6		Process consultant for HR				
7		Process consultant for Academics				
8		Process consultant for General Administration				
9		Team Leader of Functional Consultants & Technical Resource				
10		Onsite Support Engineer 1				
11		Onsite Support Engineer 2				

PART I: Evaluation criteria of the Bid

THE PROPOSAL EVALUATION PROCESS

Proposals will be evaluated by a Committee of Experts (the “Committee”) appointed by THSTI and comprising of members both from THSTI and RCB. THSTI or such other authority designated by THSTI as the case may be is also referred to herein as the Committee of Experts (or “Committee”).

THSTI has the right to appoint any individual / organization as an expert member of this committee as long as the particular person does not have any conflict of interest in the bidding/evaluation process.

THSTI has the right to share the contents of the proposals or bids with the experts or consultants appointed for the purpose of evaluation of the bids, as the case may be.

Evaluations of bids will be only on the basis of information provided by the bidders in the proposals, Site Visit evaluation reports which is to be made by the Committee of Experts, or any additional information provided by the bidders against specific requests for clarifications sent by THSTI during the evaluation process. All the documents submitted against the EOI should stand correct and valid at the time of this evaluation. Any deviation in the documents submitted earlier must be explicitly brought under the notice of THSTI and RCB.

THE PROCESS OF EVALUATION

Evaluation as per Quality & Cost Basis Selection (QCBS)

Threshold for short listing bidder for technical evaluation will be 75 marks (seventy five marks). THSTI shall short list all the agencies/Bidders who secure the minimum cut off of 75% (Seventy Five Percent) on aggregate basis. However THSTI has an absolute right to enhance or relax the threshold marks for technical evaluation.

The technical evaluation carried out by THSTI management would be final in all aspects.

The financial proposals of only technically shortlisted consultants will be opened and will be ranked in terms of their total evaluated cost.

Technical Points will be awarded to the bidder based on their technical evaluation score. Technical Points will be evaluated as below

- If technical score scored by A, B & C is 90, 81 & 72 resp. the Technical points scored by A,B &C will be 90, 81 & 72 resp.

Firm	Technical Score	Technical Points
------	-----------------	------------------

RFP for ERP solution at THSTI and RCB

A	90	90
B	81	81
C	72	72

In case of financial bid, firm with lowest price will be given 100 as Price Point and Price Points of other two bidders will be calculated with formula as below:

Lowest Price/Individual Price X 100.

If price quoted by B is 90 (lowest one) and price quoted by A and C are 120 and 96 resp., then Price Point of B = 100 and Price Point of A = $90/120 \times 100 = 75$ and price point of C = $90/96 \times 100 = 93.75$.

Firm	Technical Score	Technical Points
A	120	75
B	90	100
C	96	93.75

For evaluating the Total Points, quality and cost basis selection shall be applied with below mentioned weights

Parameters	Weights
Technical Points	70%
Financial Points	30%
Total	100%

The Total Points shall be calculated using the formula as (Technical Point x 0.70 + Price Point x 0.30)

The proposals/Bids securing the highest Total Points in the above evaluation will be ranked as H-1 followed by the proposals securing lesser marks as H2, H3, etc. Illustration of the same is as below

Firm	Technical Points (T)	Financial Points (F)	Total Points (0.7XT+0.3X)	Ranking
A	90	75	85.50	H2
B	81	100	86.70	H1
C	72	93.75	78.53	H3

The firm with the Highest ranking (H1) shall be recommended for engagement. In scenario of a tie in Total Points, firm with higher Technical points will be ranked higher. In scenario of tie up of both Total Points and Technical Points, Firm with higher Financial Points will be ranked higher. In case there is a tie in each of Total Points, Technical Points, Financial Points and Presentation Points, fresh financial bids shall be invited.

A maximum of 100 points will be allocated for the technical proposal for the different parameters listed in the technical proposal requirements for ERP solution, as per following distribution.

Parameter	Points	Brief Description
Solution fitment and timeline	50 points	Bidders self-assessment of the offered modules of product (Max Marks 20) + Marks based on the live demo of the product made earlier during EOI evaluation (Max Marks 20) + Marks for the project duration(Max Marks 10)
ERP implementation site visit (Detailed Below)	25 points	5 points for each module – HR, Academics, Finance, Purchase & stores & 5 points for IT Support Based on Evaluation criteria specified
Project team Profiling (Detailed below)	15 points	As per Evaluation criterion specified
Security features	10 points	For encryption of important /sensitive data, adopted authentication methods and other security related features and methodologies. Based on the submitted documents, the marks will be awarded by the THSTI and RCB committee or Management in its absolute discretion.
Total Score	100 points	

Out of a possible 100 points, a proposed ERP solution should score a minimum of 75 points to qualify in the technical evaluation.

Solution Fitment and Timeline: Maximum Marks 50

1) Bidders self-assessment of the offered modules of product (Max Marks 20)

THSTI and RCB are looking for COTS Solution which would need minimum customization, if any, the solution proposed will be rated accordingly – the solution which need less customization being rated better than the others.

The response for the solution fitment will be scored based on the five types of responses – readily available or standards, work around needs customization, not available but met through third party tool, not available/not proposed or addressed.

Compliance	Guidelines	Response	Marks
Standard	The specific requirement or process is a standard feature with the ERP solution	S	4
Work Around	The requirement can be realized by modifying the process but without any development	W	3
Customization	The requirement can be realized by writing a set of software codes	C	2
Third Party	The specific requirement is realized through a third party tools	T	1
Not Possible	The requirement is not possible or not part of the proposed ERP solution	N	0

The appropriate response for each of the following module should be made as per **Attachment 8** of the technical bid.

2. Marks based on the live demo of the product made earlier during EOI evaluation (Max Marks 20)

During the evaluation of the submitted EOI, the prospective bidders made a Live Demo presentation of their ERP Solution covering the aforementioned modules. Based on that, the committee will give befitting marks for each of the following functionality of their ERP Solution.

Functionality/Feature	Max Marks (20)
User Management- Form Level Control	4
User Interface - Friendliness	4
Ease of navigation- TAB/Mouse/Scrolling, view panes, quick links	4
Functionality –Level of completeness of Process	4
Configurability level	4

3) Marks for the project duration (Max Marks 10)

As THSTI and RCB are more inclined towards a ready solution which involves minimum customization and work around, the bidders will be rewarded points for early completion of the project. The total project duration for complete ERP solution is 8 months, for projecting self-declared timelines earlier than that, the bidders will be rewarded by 2 Marks for each week. The total duration of 8 months can be converted into 32 weeks and as per the following table the marks will be awarded to the bidders.

#Week	32	31	30	29	28	27 or less
Marks	0	2	4	6	8	10

The information provided by the bidder in ATTACHMENT # 6 will be taken to award these marks.

Evaluation Criterion for ERP Implementation Site Visit: Maximum Marks 25

During the site visit, the committee members will take the user feedback on the following benchmark/preferences and a rating for the response from the user will be marked. Based on that the final evaluation of the site visit will be done and will abide to the bidder.

Evaluation Criterion	Benchmark / Preferences	Rating Scale
IT Evaluation (5 points)	<p>Size of data base Handled & capability (Minimum 30GB) (0 Mark for less than 30 GB, 1 mark for more than 30 GB)</p> <p>Complaint Ticket Management- Average resolution time- Less than 2 hrs. (0 Mark for more than 2 Hours)</p> <p>Escalation Matrix (Auto escalation:1 mark OR user intervention: 0 Mark)</p> <p>Uptime in past one year min. 99% (2 Marks for more than 99% Uptime)</p>	<p>0 OR 1</p> <p>0 OR 1</p> <p>0 OR 1</p> <p>0 OR 2</p>
<p>4 Marks for each of the Five modules i.e. (Finance, Procurement, HR, Academics, General Administration)</p> <p>Total 20 Points</p>	<p>Ease of use i.e. quick links</p> <p>Navigation – Tab/Mouse/Quick Keys/No horizontal scrolling – only vertical</p> <p>User Help Windows (for ex vendor name selection on alphabets, key words etc.)</p> <p>Configurability Level –Except for new law , everything to be user defined- no hard coded</p>	<p>0 OR 1</p> <p>0 OR 1</p> <p>0 OR 1</p> <p>0 OR 1</p>

Evaluation Criterion for Project team (Maximum Marks 40. To be normalized for 15 Marks)**Fill ATTACHMENT # 9 against which the marks will be awarded.**

Evaluation Criterion	Benchmark / Preferences	Rating Scale	
Total Years of Professional Experience (25 points)	Project Manager to have minimum 5 years of relevant experience (2.5 Marks will be awarded for each additional year of relevant experience) (Maximum 10 Marks)	0 TO 10	
	Team Leader of Functional Consultants & Technical Resource to have minimum 3 years of experience (1 Mark will be awarded for each additional year of experience) (Maximum 6 Marks)	0 TO 4	
	Team Leader of Consultants / Developers team to have minimum 3 years of relevant experience in developing ERP modules. (2 Marks will be awarded for each additional year of experience) (Maximum 4 Marks)	0 TO 6	
	Individual Process Consultant for Process (1 mark for each module i.e. Finance, Procurement, HR, Academics, General Administration) (Maximum 5 Marks)	0 TO 5	
	Certifications(2 points)	Relevant Project Management Certification for Project Manager (2 marks for certification, Maximum 2 Marks)	0 OR 2

<p>Number of similar Assignments(13 points)</p>	<p>Project Manager must have handled preferably 2 assignments of ERP development/implementation projects. (2 mark for each additional project) (Maximum 8marks)</p> <p>Both the onsite support engineers to be deputed during the warrantee period have more than 2 years of relevant experience (Either 0 or 5)</p>	<p>0 to 8</p> <p>0 OR 5</p>
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PART – J: FINANCIAL BID FORMAT

NOTE : The price bid format has three parts A, B and C. The financial bid will be finalized based on the comparison of the figure obtained after adding part A and part B. The cost of project should include cost of Supply, Customization, Installation, Integration, Implementation, Testing, Training and 3 years warrantee (Refer Scope of Warrantee as described in Part G). The price quoted should be exclusive of GST.

PART A - SUPPLY OF ERP SOLUTION WITH ALL MANDATORY REQUIREMENTS, SUPPLY, CUSTOMIZATION, INSTALLATION, INTEGRATION, IMPLEMENTATION, TESTING, TRAINING AND 3 YEAR COMPREHENSIVE WARRANTEE AT THSTI AND RCB, NCR-BIOTECH CLUSTER, FARIDABAD, HARYANA.

	ERP PRODUCT, VERSION OR NAME OF THE THIRD PARTY PRODUCT	MODULE	AMOUNT (Rs.)
1		Finance	
2		Procurement , Stores & Inventory	
3		General Administration	
4		Human Resource including Employee management System	
5		Academics	
<p>NOTE: Common modules like Reports, MIS, etc. should be integrated with the items mentioned from SI no. 1 to 5. The cost should be inclusive of required database, Operating System etc. and to be installed, maintained at THSTI and RCB separately.</p>			
<p>SUB TOTAL FOR THSTI & RCB, Faridabad Price (PART – A)</p>			

PART B – Annual Maintenance Contract for 4th and 5th year.

S. NO.	Item Description	Total Amount (Rs)
1	Annual Support Effort and cost for 4 th year	
2	Annual Support Effort and cost for 5 th year	
FOR THSTI & RCB, Faridabad Price (PART – B)		

Total Figure for price bid comparison Part(A) + Part (B) (IN NUMBERS)	
Total Figure for price comparison Part(A) + Part (B) (IN Words)	

PART C - OPTIONAL ITEMS (HARDWARE COMPONENTS, DATABASES AND WEBSITE)

S. NO.	ITEM (An extra sheet for technical details of quoted item to be attached)	Nos.	Rate	Amount	Remarks
1	Server Specifications & Cost of any other hardware (if any)				

RFP for ERP solution at THSTI and RCB

2	THSTI Website (As specified in Part F)	01			
3	RCB Website (As specified in Part F)	01			
4	Any other modules proposed by Bidder				
5	One qualified onsite support engineer for 1 month	01			
6	Database Specifications & Cost	01			

NOTE: THSTI & RCB reserve the right to reduce the scope of supply at their own discretion for example to drop any module from scope of ERP supply or scope of hardware supply without recourse to bidder. For S.NO. 4 PART C, the engineer so deputed will have to remain necessarily at site during the working hours of THSTI & RCB and will be responsible for smooth functioning of the Client & server software. The bidder has to comply with the existing labour laws as amended from time to time.

PART- K: ANNEXURESANNEXURE-ICHECK LIST

Sl. No	Description	Included (Y/N/NA)	Remarks
1	Technical bid should contain copy of Demand Draft of Rs. 2, 00,000/- (Rupees Two Lakh only) payable towards EMD. The original Demand Draft should reach the THSTI by 15th Jan 2018		
2	Technical bid should contain all information as in the Financial bid, except for the price information. The split-up part numbers of the line item should be present.		
3	Attachment 1 to 8 as per PART H		
4	Form 1, 2 and 3		
5	Detailed workflow / Solution document of the offered system attached in the technical bid.		
6	Technical Bid and Financial bid are to be uploaded separately.		
7	A copy of the tender document, with all pages signed by the authorized person is to be uploaded along with the technical bid.		
8	Complete BoQ is quoted.		
9	Financial bid should contain full price details (i.e. Part A + B)		
10	Split-up part numbers of each item of the BoQ is to be shown in the financial bid with line item cost.		

Form of Performance Bank Guarantee/Bank Guarantee

BG No.: Date.....

<p>From</p> <p>The Name of the Bank</p>	<p>To</p> <p>Translational Health Science Technology Institute, NCR Biotech Science Cluster- Faridabad 121001</p>
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In consideration of the Translational Health Science and Technology Institute, NCR Biotech Science Cluster- Faridabad (hereinafter called “The INSTITUTE”) having offered to accept the terms and conditions of the proposed agreement between The Institute.....and..... (hereinafter called “the Contractor(s)”for the work..... (hereinafter called “the said agreement”) having agreed to production of an irrevocable Bank guarantee for Rs..... (Rupees.....only) as a security/guarantee form the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We (hereinafter referred to as the “Bank”) hereby undertake to (Indicate the name of the Bank) Pay to the Institute an amount not exceeding Rs..... (Rupees..... only) on demand.
2. We...(indicate the name of the Bank) Do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Institute stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs..... (Rupees.....only).
3. We, The said Bank, further undertake to pay to the Institute any money so demanded notwithstanding any disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder, and the contractor(s) shall have no claim against us for making such payment.
We (indicate the name of the Bank) further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement, and it shall continue to be enforceable till all the dues of the Institute under or by virtue of the said agreement have been fully paid, and its claims

satisfied or discharged, as per the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s), and accordingly discharges this guarantee.

4. We.....(Name of the bank)..... further agree with the Institute that the Institute shall have the fullest liberty without our consent, and without effecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Institute against the said contractor(s), and to forbear or enforce any of the terms and conditions relating to the said agreement, and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said not be relieved from our liability by reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Institute or any indulgence by the Institute to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
5. This Guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
6. We (Name of the bank)..... lastly under take not to revoke the Guarantee except with the previous consent of the Institute in writing. This bank Guarantee on the Bank or its successors or permitted assigns.
7. We..... (Indicate the name of the Bank)..... lastly undertake not to revoke this Guarantee except with (indicate the name of the Bank) the previous consent of the Institute extended on demand by the Institute. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs..... (Rupees.....only), and unless a claim/demand is made on the bank in writing on or beforeall your rights under the Guarantee will be forfeited and we shall be relieved and discharged from all liabilities thereunder.

Authorised Signatories of the Bank with name and Seal

Name of the Officer:

Designation:

Code if any:

Date:

Place

Guidelines to bidders on CPPP e-Procurement Module

1. Procedure for Registration by the Bidder

1.1. Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "Click here to Enrol" on the CPP Portal.

1.2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

1.3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.

1.4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.

1.5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

1.6. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

2. Searching for Tender Documents

2.1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.

2.2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

2.3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

3. Procedure for preparation and submission of bids

3.1. The documents should be page numbered and contain the list of contents with page numbers. The deficiency in documentation may result in the rejection of the Bid.

3.2. Bidder should take into account any corrigendum published (if any) on the tender document before submitting their bids.

3.3. Bidders are advised to go through the Tender advertisement and the Tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

3.4. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF formats. Bid documents may be scanned with 100 dpi.

3.5. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

3.6. As part of the bid, bidder should provide all the documents as follows:-

- Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

- The serve time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- All the documents being submitted by the bidders would be encrypted to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings

4. Assistance to Bidders

Any queries relating to the NIT document and the terms and conditions contained therein should be addressed to the Store Purchase Officer, Translational Health Science and Technology Institute, Faridabad.

Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 3070 2232.

PART L: Bid Formats / Forms

Form-1: Bid Submission Form *(to be submitted on the letter head of the bidder)*

To
The Executive Director,
Translational Health Science and Technology Institute,
NCR BIOTECH SCIENCE CLUSTER,
3rd Milestone, Faridabad-Gurgaon Expressway,
PO Box No. 04,
Faridabad - 121 001, Haryana (NCR Delhi), India
Phone: 91 129 2876432

Subject: Submission of bid for “Supply, Customization, Installation, Integration, Implementation, Testing, Training and Maintenance of ERP system at THSTI and RCB, NCR-Biotech Cluster, Faridabad, Haryana”.

Dear Madam,

We, the undersigned, offer to provide services to THSTI and RCB, NCR BIOTECH SCIENCE CLUSTER activities for implementation of ERP in response to your notice inviting RFP dated..... We are hereby submitting our proposal, which includes all the relevant documents.

We hereby declare that all the information and statements made in this bid are true and accept that any misinterpretation contained in it may lead to our disqualification and rejection of the bid.

We also understand that you are not bound to accept any proposal you receive.

We also declare that in case of discontinuation of the offered product by the OEM, we will extend the full warranty and maintenance as per the terms, conditions and price quoted by us in this bid. We also declare that after the expiry of AMC period we will be wilful to extend it for upto next 5 (Five) years on the mutually agreed terms, conditions and price. We also declare that the offered product is not an end-of-life product.

Yours faithfully,

Authorised signature (in full and initials)

Name and designation of the signatory

Name of the Firm

Business address

Office seal.....

Place.....

Date

Form-2: Certificate of Conformity

(to be submitted on the letter head of the bidder)

To

The Executive Director,
Translational Health Science and Technology Institute,
NCR BIOTECH SCIENCE CLUSTER,
3rd Milestone, Faridabad-Gurgaon Expressway,
PO Box No. 04,
Faridabad - 121 001
Haryana (NCR Delhi), India
Phone: 91 129 2876432

CERTIFICATE

This is to certify that, the services for THSTI and RCB for “Supply, Customization, Installation, Integration, Implementation, Testing, Training and Maintenance of ERP system at THSTI and RCB, NCR-Biotech Cluster, Faridabad, Haryana” which I shall provide, if I am awarded with the work, are in conformity with the Scope of Work in the RFP document.

Yours faithfully,

Authorised signature *(in full and initials)*

Name and designation of the signatory

.....

Name of the Firm

Business address

Office seal.....

Place.....

Date

Form-3: Manufacturer's/Developers/OEM Declaration

(to be submitted on the letter head of the Manufacturer's/Developers/OEM)

No. _____

dated _____

To

The Executive Director,
Translational Health Science and Technology Institute,
NCR BIOTECH SCIENCE CLUSTER,
3rd Milestone, Faridabad-Gurgaon Expressway,
PO Box No. 04,
Faridabad - 121 001
Haryana (NCR Delhi), India
Phone: 91 129 2876432

Subject: Declaration of service guarantee

Respected Sir/Mam,

We _____ who are established and reputed developers/manufacturers of **ERP solution**, having main unit/ Head Office at _____ Do hereby authorize M/s _____ (Name and address of the Agent/Dealer) to offer their quotation, negotiate and conclude the contract with you against the above invitation for tender offer. We hereby extend our full guarantee and warranty as per terms and conditions of the RFP and the contract for the equipment and services offered against this invitation for tender offer by the above firm. We also declare that the offered product Make: _____ Version: _____ is not an end-of-life product and the technologies used to create this product are not obsolete.

Yours faithfully

(Name)

For and on behalf of

M/s _____ (Name of Manufacturers)