

Request for Proposal
For
Selection of Agency for Software Testing of HRMS Application,
Bihar

Tender Reference No.: – NIT/BSEDC/08/25/2026-27, Date: - 25-09-2026



Bihar State Electronics Development Corporation Limited (BELTRON)

(A Government of Bihar Undertaking)

Beltron Bhawan, Shastri Nagar,

PATNA, BIHAR PIN CODE-800023

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RFP Fact-Sheet & Important Dates

Department Name and contact information	Bihar State Electronics Development Corporation Limited Beltron Bhawan, Shastri Nagar, Patna-800023 Phone No- 0612-228242 Email ID - vivek.nirala@semt.gov.in
Nature of Work	Selection of agency for software testing of HRMS application, Bihar
Portal for downloading tender documents and proposal submission	The tender is available and downloadable on e-Tendering website: https://eproc2.bihar.gov.in All subsequent changes to the bid document shall be published on the above website.
Mode of bid submission	Online at Bihar State e-Proc2.0 website https://eproc2.bihar.gov.in
Method of Selection	Lowest Cost (L1) among Technically Qualified Bidders scoring a minimum of 70% marks in Technical Evaluation (see Clause 16.1)
Bid Validity	Bids submitted on this RFP must be valid for a period of 180 days from the last date of submission of bids.
Tender Currency	INR
Joint Venture/Consortium	Not Allowed
Tender Fee (Non-refundable)	Non-refundable fee of Rupees 10,000 (Rupees Ten Thousand Only) via Online Payment at Bihar e-Proc2 website.
Tender Processing Fee (Non-refundable)	Rupees 5,900 (Rupees Five Thousand Nine Hundred Only) payable via e-Proc2 website.
Bid Security/EMD	The bid must include an Earnest Money Deposit (EMD) deposit of Rupees 5,00,000 (Rupees Five Lakh Only), payable through e-Proc2 website by e-payment modes such as NEFT, RTGS, Credit Card, or Debit Card (in Indian Rupees); or in the form of Bank Guarantee as per proforma given in this RFP. The bid security, if paid through bank guarantee, will have to be valid for a period of 45 days after bid expiry date. Proof of payment of EMD deposit must be attached with the technical bid.
Performance Bank Guarantee (PBG)	The successful bidder will have to deposit a Performance Bank Guarantee (PBG) equivalent to 10% amount of contract value, within specified timeline, after issuance of LoI. The PBG must be issued in the prescribed proforma in this RFP, by a scheduled commercial bank/nationalized bank in favor of "Bihar State Electronics Development Corporation Limited, Patna" and should be payable at Patna, Bihar". The PBG must remain valid for a period of upto 90 days, after the expiry of contracted period.
Contact for submission of Pre-bid queries and correspondence	Bihar State Electronics Development Corporation Limited Beltron Bhawan, Shastri Nagar, Patna-800023 Phone No- 0612-228242 Email ID - vivek.nirala@semt.gov.in
Start date of bid submission	29.09.2026 from 05:00 PM
Last date for submission of pre-bid queries for clarifications	05.10.2026 till 5:00 PM
Pre bid Meeting	06.10.2026 at 12:00 PM, BELTRON Bhawan, Patna-800023

Last date (deadline) for submission of bids	20.10.2026 till 5:00 PM
Opening of General & Technical Bids	22.10.2026 at 11:00 AM
Date and Time of Opening Financial Bid	To be informed later
Technical support helpline regarding e-proc queries and support etc.	Toll Free No:1800-572-6571 Email Id: eproc2support@bihar.gov.in
Bid Submission	Technical and financial proposal shall be uploaded on e-procurement portal, https://eproc2.bihar.gov.in original hardcopy of the EMD (if) in the form of BG should be submitted in the tendering authority office as per date and time mentioned in the RFP.

1. Introduction

I. Purpose of the RFP

This Request for Proposal (RFP) is issued to solicit technical and financial bids/proposals from eligible bidders for conducting end-to-end Software Testing. The Government of Bihar intends to implement a mission-critical Human Resource Management System (HRMS) to manage the entire service lifecycle of approximately 8 lakh (800,000) employees. To achieve this, this Request for Proposal (RFP) is issued to select a specialized Independent Software testing Agency tasked with providing comprehensive Testing and Quality Assurance Services.

The primary objective of this engagement is to ensure the HRMS is robust, secure, and fully compliant with the State's complex administrative framework. Central to this mission is the systematic validation of regulatory and rule-based integrity, ensuring that all functionalities—including Payroll, Cadre, and Pension—strictly adhere to the Bihar Service Code, Bihar Treasury Code, and specific departmental rules through meticulous workflow validation.

System Robustness: Furthermore, the selected agency must guarantee high-volume performance by verifying the system's ability to handle massive concurrent loads of up to 25,000 users during peak cycles, such as monthly salary processing and annual increments, without performance degradation.

Security: Security is of paramount importance in this project. The agency will conduct exhaustive Security Testing (Vulnerability Assessment and Penetration Testing) to protect sensitive Employee Personally Identified Information (PII) and ensure secure financial data exchange with the Comprehensive Financial Management System (CFMS). The scope also extends to validating interoperability through seamless API-based data exchange with external entities like NSDL, Aadhaar, and various Recruitment Agencies.

Ultimately, the agency will provide a formal, evidence-based certification confirming that the application's web and mobile interfaces are compliant with GIGW standards, signifying the system is fully "Production Ready" for a successful state-wide rollout.

II. Overview of the HRMS System

- a. The HRMS is a comprehensive enterprise application designed to manage the **entire lifecycle of regular government employees**, from onboarding to retirement.
- b. It serves as the single source of truth for all employee-related data, ensuring accuracy, consistency, integrity and controlled accessibility.

- c. The system includes a robust decision support system to provide insightful analytics and reports for strategic decision-making, workforce planning, and policy formulation.

III. Implementation Phases of HRMS

- a. **Phase 1:** Focuses on Pay Bill Processing and integration with the Comprehensive Financial Management System (CFMS).
- b. **Phase 2:** Includes functionalities such as Leave Management, Loan Management, Cadre Management, Exit Management and other critical HR processes.

IV. Scope of Work for the Software Testing

- a. Scope of work for the Human Resources Management System (HRMS) being implemented for the Government of Bihar. The testing services encompass Functional Testing, Performance Testing, and Security Testing to ensure the system meets all specified requirements as per defined scope/terms & conditions of government and it is production-ready for approximately 8 lakh employees.
- b. The appointed Software Testing Agency shall conduct comprehensive testing to identify bugs, defects, vulnerabilities, and compliance gaps in the HRMS application.
- c. All identified issues shall be shared with the Software Development Agency (SDA) for resolution. After fixes are implemented, the Testing Agency shall perform re-testing and validation to ensure the issues have been resolved satisfactorily.
- d. Defect Reporting
All defects identified during testing shall be classified based on severity:

Severity Level	Description
Critical	System crash, security breach, or major functionality failure
High	Major feature not working
Medium	Partial functionality issue
Low	Minor UI or usability issue

The defect report shall be shared with the **Software Development Agency** for resolution.

V. Tender Document Availability:

- a. The tender document can be obtained from the Tender section on the website:
[<https://www.eproc2.bihar.gov.in>]

VI. Corrigendum/Addendum

- a. Any updates, corrigendum, or addendum related to the tender will be published the web site (<https://www.eproc2.bihar.gov.in>)
- b. Bidders are advised to regularly check the website for any changes or additional information.

VII. Bihar State Electronics Development Corporation Limited (BSEDCL) shall not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of their proposals.

VIII. Right to Reject or Cancel Tender

BSEDC Ltd. reserves the right to accept or reject any or all bids, or cancel the tender process, at any stage, without assigning any reason.

IX. Invitation to Bidders

Competent and certified Software Testing Agencies/Quality Assurance (QA) agencies with proven experience in functional and non-functional testing of largescale Human Resource Management Systems (HRMS) or similar enterprise applications

X. The selected bidder will collaborate closely with the Government of Bihar (BSEDC/ Concerned Department) and the System Integrator (SI/Development Team) to validate system readiness.

XI. The agency shall act as an independent third-party validator, ensuring that the HRMS meets defined quality benchmarks and safe-to-host criteria prior to state-wide deployment.

2. Objective of the Project

- Validate that the HRMS meets all functional, non-functional and technical requirements.
- Ensure the application is scalable, secure, and performant under peak load conditions.
- Provide independent assurance to the Government of Bihar on quality, compliance, and readiness of the HRMS application.

3. Tendering Process

- I. BSEDC now invites proposals from interested bidders to test the HRMS application, Bihar.
- II. Payment will be released by Bihar State Electronics Development Corporation Limited.
- III. Bidders shall submit the prequalification details and commercial bid through <https://eproc2.bihar.gov.in>.
- IV. Bidder shall submit the separate technical bid and commercial bid.

4. Definitions

- I. **“Agreement”** means the Agreement to be signed between the successful bidder and Bihar Electronics Development Corporation Limited (BSEDC), including all attachments, appendices, all documents incorporated by reference thereto together with any subsequent modifications, the RFP, the bid offer, the acceptance and all related correspondences, clarifications, presentations.
- II. **“Authorized Representative”** shall mean any person authorized by either of the parties.
- III. **“Bidder”** any company offering the solution(s), service(s) and /or materials required in the RFP. The word Bidder when used in the pre award period shall be synonymous with Bidder, and when used after award of the Contract shall mean the successful Bidder with whom Bihar State Electronics Development Corporation Limited, signs the agreement for rendering services for Software Testing.
- IV. **“Contract”** is used synonymously with Agreement (if any), pursuant to this RFP.
- V. **“Corrupt Practice”** means the offering, giving, receiving or soliciting of anything of value or influence the action of an official in the process of Contract execution.
- VI. **“Default Notice”** shall mean the written notice of Default of the Agreement issued by one Party to the other in terms hereof.
- VII. **“Fraudulent Practice”** means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the BSEDC of the benefits of free and open competition.
- VIII. **“Coercive Practice”** means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or its property to influence improperly the actions of a party in connection with the Tendering Process or the execution of the Contract.
- IX. **“Collusive Practice”** means an arrangement between two or more Bidders, with or without the knowledge of BSEDC, designed to establish Bid prices at artificial, non-competitive levels for the purpose of depriving BSEDC of the benefits of free and open competition.

- X. **“Restrictive Practice”** means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or eliminating competition or affecting the price quoted in the Bid.
- XI. **“Undesirable Practice”** means establishing contact, directly or indirectly, with any person connected with or employed or engaged by BSEDC with the objective of canvassing, lobbying, or in any manner influencing or attempting to influence the Tendering Process, or the existence of a Conflict of Interest that has not been disclosed.
- XII. **“GoB”** means Government of Bihar.
- XIII. **Contract Price** means the payment payable to the selected bidder for the services under the agreement.
- XIV. **“Law”** shall mean any Act, notification, by law, rules and regulations, directive, ordinance, order or instruction having the force of law enacted or issued by the Central Government and/ or Government of Bihar or any other Government or regulatory authority or political subdivision of government agency.
- XV. **“LOI”** means issuing of Letter of Intent which shall constitute the intention of the Tenderer to place the Purchase Order with the successful bidder.
- XVI. **“Party”** means Bihar State Electronics Development Corporation Limited or Bidder, individually and **“Parties”** mean Bihar State Electronics Development Corporation Limited and Bidder, collectively.
- XVII. **“Period of Agreement”** means the time period that will be defined in the LOI/MSA of the project.
- XVIII. **“Proposal”** means Technical Proposal and the Financial Proposal submitted by bidder.
- XIX. **“Purchaser”** means Bihar State Electronics Development Corporation, Patna.
- XX. **“Request for Proposal (RFP)”**, means this NIT/RFP/Tender document, i.e., detailed notification seeking a set of services(s), materials and/or any combination of them.
- XXI. **“Requirements”** shall mean and include scope of work, vendor obligations, schedules, details, description, statement of technical data, performance characteristics, standards (Indian as well as International) as applicable and specified in the RFP.

- XXII. **“Site”** shall mean the location(s) for which the Contract has been issued and where the service shall be provided as per agreement.
- XXIII. **“Service”** means provision of Contracted service viz., testing, reporting, coordination and associated services for the NIT as per this RFP.
- XXIV. **“Termination Notice”** means the written notice of termination of the Agreement issued by one Party to the other in terms hereof.
- XXV. **SLA:** Service Level Agreement between Bihar State Electronics Development Corporation Limited (BSEDC) and the selected Testing Agency, defining the timelines, deliverables and performance standards for the project.
- XXVI. **“BSEDC” or “Beltron”** means Bihar State Electronics Development Corporation Limited.
- XXVII. **“System Integrator (SI)”** means the agency responsible for the design, development, and implementation of the HRMS application.
- XXVIII. **“Safe-to-Host Certificate”** Means Safe-to-Host Certificate” means the official certification issued by a CERT-In empaneled auditor, based on security assessment inputs, VAPT reports, and compliance documentation provided by the Testing Agency.
- XXIX. **“Defect/Bug”** means any flaw or deviation in the HRMS application where the actual result does not meet the functional or technical requirements specified in the RFP.
- XXX. **“Technical Testing Strategy”** means the document prepared by the Testing Agency that defines the testing methodology (test environment, resource allocation and the detailed scheduled for all testing cycles.
- XXXI. **“VAPT”** Means Vulnerability Assessment and Penetration Testing conducted to identify security vulnerabilities and cyber risks.

5. Scope of Work

The scope of testing services and related obligations of the agency, include (but not limited to) Functional/non-functional requirements Testing, Performance Testing, load testing and Security Testing to ensure the system meets all specified requirements and is production-ready for approximately 8 lakh employees (approximately)

Requirement Gathering Responsibility of the Testing Agency

I. Requirement Understanding and Stakeholder Consultation

The selected Software Testing / System Audit Agency shall be responsible for comprehensive requirement collection and validation of the HRMS (Human Resource Management System) application.

For this purpose, the agency shall undertake requirement gathering activities through consultation with concerned departments and stakeholders of the Government of Bihar.

The agency shall coordinate with officials from various departments to:

- Understand the functional workflow and operational processes of HRMS modules.
- Identify expected system behavior and business rules for each module.
- Validate functional requirements and process alignment with departmental practices.
- Capture module-wise testing scenarios and user expectations.

The agency shall prepare a Project Requirement Document (PRD) or Functional Understanding Report based on these consultations, which shall form the basis for preparation of test cases.

II. Department Visits for Requirement Gathering

The Software Testing Agency shall establish one-to-one, physical contact with concerned departments to understand the operational usage of the HRMS application.

The agency shall:

1. Visit the identified departments as required for understanding department-specific HRMS workflows, requirements and testing related concerns/preferences (if any).
2. Interact with designated nodal officers, senior officials, and system users to capture functional and operational requirements and prepare test strategy and test plans in detail.
3. Document module-wise user expectations and operational dependencies.
4. Ensure that the testing approach adequately reflects actual user scenarios and system usage patterns.

III. Availability of User Manuals

The User Manuals and functional documentation for different HRMS modules shall be provided to the selected Software Testing Agency by Bihar State Electronics Development Corporation Limited (BSEDC).

The Testing Agency shall review these documents to:

- Understand the functional scope of each HRMS module
- Prepare test scenarios and test cases
- Validate system functionality against documented processes

IV. Responsibility of the Testing Agency

The Software Testing Agency shall be fully responsible for:

- Studying the user manuals and project documentation
- Conducting stakeholder consultations and departmental interactions
- Preparing comprehensive test scenarios based on real operational workflows
- Ensuring that the testing process covers all functional modules of HRMS

1. Types of Testing

I. Module-Level Testing

Comprehensive testing of all the modules developed and deployed for the HRMS application (Ref – RFP documents):

- Business rule validation as per Bihar Government service rules
- Field-level validations (mandatory fields, data types, ranges)
- Calculation accuracy (payroll, leave balance, loans, taxes, pensions, NPS)
- Multi-level approval workflows
- Report generation and data export
- Notifications (SMS/E-mail etc)

II. Integration Testing

- CFMS Integration for bill generation and submission
- Biometric attendance system integration
- Recruitment agency interfaces (BPSC, BSSC, BTSC, Police Selection Board)
- Vigilance Department interface
- Inter-module data flow (Payroll-Leave-Attendance, HR-Service Book)

III. End-to-End Business Process Testing of all the Modules of HRMS application

IV. Security Testing

- Authentication, authorization & accountability
- Role-based access control (RBAC)
- Data encryption (data at rest and data in transit)
- SQL injection and XSS vulnerability testing
- Session management and timeout
- Password policies
- Audit trail integrity

V. Compatibility Testing

Browser Compatibility:

- Chrome, Firefox, Edge, Safari (latest and previous versions)

Operating System:

- Windows 10/11, Ubuntu Linux, macOS

Mobile:

- Android 11.0+, iOS 13+ on various screen sizes

VI. Performance Testing

- Validate system performance under expected and peak load conditions
- Identify performance bottlenecks
- Ensure response times meet user expectations
- Validate system scalability
- Test system stability under sustained load
- Verify database performance
- Assess network bandwidth requirements

VII. ACCEPTANCE CRITERIA

The testing engagement will be considered successful when:

- All test cases for all the HRMS modules are executed and documented
- Defects: 100% resolved and closed
- Performance benchmarks met (response time, throughput, error rate)

- Security testing completed successfully
- All deliverables submitted and accepted by BSEDC and [BPSMS – authority/agency name to be confirmed]
- Test Summary Report demonstrates system readiness
- Formal sign-off obtained from stakeholders

VIII. Summary of Key Deliverables

- Test Strategy, Plan, RTM
- Functional, Performance, Security Test Reports
- Defect Closure Report
- VAPT Certificate (**Vulnerability Assessment and Penetration Testing.**)
- UAT Sign-off
- Go-Live Readiness Certificate for HRMS application

The test environment and infrastructure shall be provided by Bihar State Electronics Development Corporation Limited (BSEDC Ltd.).

5.1. Access to Testing Environment

Bihar State Electronics Development Corporation Limited (BSEDC) shall facilitate the following:

- Provision of server space at State Data Centre to create testing environment for the HRMS application.
- Access to relevant **application modules, interfaces, gateways, resources and APIs**, as required for conducting testing and audit activities.
- Coordination with the **Software Development Agency** for clarification related to application functionality, configuration, and deployment.

The testing agency shall ensure that the access provided is used **solely for the purpose of testing** related to the HRMS application.

5.2. Test Environment Requirements

Infrastructure:

- Dedicated test environment separate from development and production
- Mirroring production architecture
- Test data management environment
- Integration environment for CFMS testing
- Mobile application

- Network simulation tools
- Performance testing infrastructure

Data Requirements:

- Test data covering all scenarios
- Minimum 80% of production data volume for performance testing
- Anonymized production data for realistic testing
- Synthetic data generation for edge cases
- Test data for all employee profiles

5.3. Testing Tools

BSEDC shall **not provide any software testing tools, licenses, or utilities** for the execution of testing activities.

The selected Testing Agency shall be **fully responsible for arranging and deploying all required testing tools at its own cost**, including but not limited to:

- Functional testing tools
- Non-functional testing tools
- Performance testing tools
- Security testing tools
- Vulnerability assessment tools
- Test management and defect tracking tools
- Compliance check and validation tools

All tools used by the agency shall be **legally licensed/ Open sourced and compliant with applicable software usage regulations**.

Any cost associated with procurement, licensing, maintenance, or operation of testing tools shall be **borne entirely by the Testing Agency** and **no additional payment shall be made by BSEDC for such tools**.

5.4. Test Environment Management

The selected Testing Agency shall conduct all testing activities strictly in the designated testing/staging environment provided by Bihar State Electronics Development Corporation Limited (BSEDC).

The following conditions shall apply:

- a. The Testing Agency shall ensure that all testing activities are performed only within the authorized environment and shall not attempt to access any production environment unless explicitly permitted by BSEDC.

- b. The agency shall ensure that testing activities do not impact the stability, security, or performance of other applications hosted in the State Data Centre (SDC) infrastructure.
- c. Any configuration changes, test scripts, or load generation activities that may affect system resources shall be priorly communicated and approved by BSEDC.
- d. The Testing Agency shall coordinate with BSEDC and the Software Development Agency to ensure proper deployment of updated builds, patches, or fixes in the testing environment.
- e. The Testing Agency shall maintain proper test logs, execution records, and environment usage reports during the testing period.

5.5. Defect Reporting and Escalation Mechanism

The Testing shall establish a structured defect reporting and tracking mechanism for the HRMS application.

The following process shall be followed:

1. All defects identified during testing shall be recorded in a Defect Tracking Register or Issue Management System.
2. Each defect shall include the following details:
 - Unique Defect ID
 - Module Name
 - Test data used
 - Description of Issue
 - Steps to Recreate the defect
 - Expected Result as per scope
 - Actual Result as observed
 - Defect Severity Level
 - Screenshots or logs (where needed/applicable for managing the defect lifecycle)
3. Defects shall be categorized based on severity levels such as:
 - Critical
 - High
 - Medium
 - Low

Severity Level	Description
Critical	System crash, security breach, or major functionality failure
High	Major feature not working

Severity Level	Description
Medium	Partial functionality issue
Low	Minor UI or usability issue

4. The defect report shall be shared periodically with:
 - Bihar State Electronics Development Corporation Limited
 - User departments /Authorised agencies/ Authorised personnel
 - The Software Development Agency (**through proper government channel only**)
5. Critical and high-severity defects shall be **immediately escalated to BSEDC and [BPSM – authority/agency name to be confirmed]** for prompt resolution.
6. After the Software Development Agency fixes the defects, the Testing Agency shall perform **re-testing and verification** to confirm closure of the reported issues.
7. A **Defect Closure Report** shall be submitted by the agency, at the end of each testing cycle.

Important note: Detailed scope of work is inclusive of the aforesaid items and the scope as mentioned in Annexure-1.

Onsite Manpower/ Hybrid Team Required Model

The selected Testing Agency shall deploy a minimum of four (04) key resources onsite at Patna throughout the project duration. The remaining specialized resources may be deployed in hybrid/offsite mode and shall be made available onsite whenever required by BSEDC during the relevant testing phases. The bidder shall ensure availability of all required functional, performance, database, automation and security experts throughout the project lifecycle without any adverse impact on project timelines, deliverables and quality objectives.

The **minimum required team composition** shall be as specified below in this RFP document. The **Test Lead cum Project Manager (Technical) and Senior Test Engineer shall mandatorily participate in all review meetings, progress meetings, and technical discussions** as required by the Department/BSEDC.

The selected Testing Agency shall ensure the availability of the proposed resources throughout the testing phase to ensure timely completion of all testing activities.

However, **the Testing Agency may be required to deploy additional resources, if necessary, based on project requirements, workload, or timelines**, without any additional financial implication to the Department unless otherwise specified in the contract.

Sl. No.	Resource Category	Number of Resources	Educational Background	Mandatory/ Preferred Certification	Min. Experience	Key Domain Expertise
Functional Testing Team						
1.	Test Lead cum Project Manager (Technical)	1	BE/B.Tech (Computer Science/ IT) or MCA	ISTQB CTAL-TA / CSTE (Certified Software Testing Engineer)	8+ Yrs	Large-scale ERP/HRMS and Bihar Service Code logic
2.	Domain Business Analyst	1	BE/B.Tech/MCA/ Ex-Government employee with knowledge of the Service Rules of the Government of Bihar.	N/A	8+ Yrs	Experience in e-Governance projects and knowledge about service rules of Govt of Bihar
3.	Senior Test Engineer	1	BE/B.Tech (Computer Science/ IT) or MCA	ISTQB CTAL-TA / CSTE (Certified Software Testing Engineer)	6+ Yrs	Software Testing Life Cycle (STLC), SQL for Data Validation, and API Testing.
4.	Senior QA Engineer	1	BE/B.Tech (Computer Science/ IT) or MCA /Bsc(IT)/ BCA	N/A	6+ Yrs	Integration, Regression, and Workflow testing.
5.	Junior Test Engineer	3	BE/B.Tech (Computer Science/ IT) or MCA /Bsc(IT)/ BCA	N/A	5+ Yrs	Test case execution and defect documentation.
6.	Automation Engineer	1	BE/B.Tech (Computer Science/ IT) or MCA /Bsc(IT)/ BCA	N/A	4+ Yrs	Selenium, JMeter, or similar automation frameworks.
Performance Testing Team						
7.	Sr. Performance Test Engineer	1	BE/B.Tech (Computer Science/ IT) or	N/A	8+ Yrs	Bottleneck analysis and server

Sl. No.	Resource Category	Number of Resources	Educational Background	Mandatory/ Preferred Certification	Min. Experience	Key Domain Expertise
			MCA /Bsc(IT)/ BCA			resource monitoring.
8.	DBA Specialist	1	BE/B.Tech (Computer Science/ IT) or MCA /Bsc(IT)/ BCA	Professional or Expert level Certification from any DB OEM	8+ Yrs	Query optimization and Database performance tuning.
Security/VAPT Testing Team						
9.	VAPT Lead	1	BE/B.Tech/ MCA	CEH / OSCP/CISSP / GPEN Certification (Mandatory)	8+ Yrs	Cybersecurity audit and Security Architecture.
10.	Application Security Analyst	1	BE/B.Tech/MC A/ Bsc(IT)/BCA	N/A	6+ Yrs	OWASP Top 10 and secure code review.
11.	Mobile Security Specialist	1	BE/B.Tech/MC A/ Bsc(IT)/BCA	N/A	6+ Yrs	Android/iOS security and API endpoint protection.

Sl. No.	Resource Category	Qty	Deployment Model
1	Test Lead cum Project Manager (Technical)	1	Full Time Onsite
2	Domain Business Analyst	1	Full Time Onsite
3	Senior Test Engineer	1	Full Time Onsite
4	Senior QA Engineer	1	Hybrid
5	Junior Test Engineer	3	Two Hybrid & One Full Time Onsite
6	Automation Engineer	1	Hybrid
7	Performance Test Engineer	1	Phase Based
8	DBA Specialist	1	On Demand
9	VAPT Lead	1	Security Phase Based
10	Application Security Analyst	1	Hybrid
11	Mobile Security Specialist	1	On Demand

6. Confidentiality

The agency shall be required to sign a non-disclosure agreement (NDA) for data confidentiality. All documents, data, information, records, reports, source materials, and deliverables made available to or generated by the selected Testing Agency during the course of the assignment shall be treated as Confidential Information.

The Testing Agency shall maintain strict confidentiality of such Confidential Information and shall not disclose, publish, share, or disseminate the same, in whole or in part, to any third party without the prior written consent of Bihar State Electronics Development Corporation Limited (BSEDC), except where disclosure is required by law or a competent judicial or regulatory authority.

Any breach of confidentiality shall be treated as a material breach of contract and may result in termination and/or other legal remedies available to BSEDC.

7. Local Conditions

- I. Each bidder shall be deemed to have examined and fully understood the local conditions, laws, regulations, and other factors that may affect the execution of the Contract and/or the cost thereof.
- II. The Bidder shall be responsible for obtaining all information necessary for the preparation of its Bid and for the satisfactory performance of the contract after issuance of the Letter of Award. The tenderer shall not entertain any request for clarification from the Bidder regarding such local conditions.
- III. No claim whatsoever, including claims for additional cost, extension of time, or modification of contractual terms, shall be entertained by Bihar State Electronics Development Corporation Limited (BSEDC) on the grounds of the Bidder's failure to acquaint itself with local conditions, applicable laws, or regulatory requirements.
- IV. Any failure by the Bidder to comply with or consider local conditions or applicable laws shall not be a valid ground for delay, financial adjustment, or any other relief under the Contract.

8. Conflict of Interest

The bidder shall not have any conflict of interest in connection with the services to be provided under this RFP.

1. The Software Development Agency (SDA) or any agency directly or indirectly associated with the SDA in the development of the application shall not be eligible to participate in this RFP; neither as a bidder nor as a proposed resource of required manpower in this RFP.
2. Any personnel who were involved in the design, development, or implementation of the application on behalf of the SDA at the time of issuance of this RFP shall not be deployed as part of the software testing team.
3. The bidder shall submit a declaration confirming that no conflict of interest exists.

4. If any conflict of interest is discovered during the bidding or contract period, the procuring authority reserves the right to reject the bid or terminate the contract, forfeit the EMD/PBG and blacklist the bidder.

9. Subcontracting/Outsourcing

- I. No consortiums or joint ventures are allowed in this RFP.
- II. The bidder, if selected for award of work under this RFP, shall not subcontract, in whole or in part any portion of work assigned to them.
- III. If it is found at any stage that the bidder has engaged in subcontracting or outsourcing any part of the services/scope of work, the purchaser may take the following actions:
 - Immediate termination of the contract.
 - Forfeiture of performance security.
 - Blacklisting /Debarment of the bidder.

10. Intellectual Property Rights (IPR)

- I. All reports, documents, test cases, scripts, results, and deliverables prepared by the selected agency during the execution of this project shall be the exclusive property of the purchaser.
- II. The selected agency shall not use, reproduce, distribute, or disclose the deliverables without prior written consent from the purchaser.
- III. The bidder shall ensure that the services provided do not infringe any intellectual property rights of third parties.
- IV. In case of any such infringement claim, the selected agency shall indemnify the purchaser against all legal liabilities.
- V. The agency shall ensure that all data/information/records (both hardcopy and softcopy) are submitted back to the purchaser at the end of the contract and that their employees/staff members do not possess, carry or share any of these items in any form.

11. Data Privacy and Protection

- I. The selected agency shall ensure the confidentiality and protection of all data accessed during the course of testing activities.
- II. The agency shall comply with applicable Government of India and State Government policies related to data security and privacy, including but not limited to the Digital Personal Data Protection Act, 2023, the Information Technology Act, 2000 (along with the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011), and any rules, guidelines or directions issued thereunder from time to time.

- III. The bidder shall not copy, store, transmit, or share any data outside the authorized environment without written approval.
- IV. Any breach of data confidentiality shall be treated as a serious violation and may lead to termination of the contract and legal action.

12. Termination Clause

The purchaser reserves the right to terminate the contract (in whole or part) under the following circumstances:

- I. If the selected agency fails to perform its obligations as per the terms of the contract.
- II. If the agency is found to have provided false information during the bidding process.
- III. If there is a breach of confidentiality or security requirements.
- IV. If the agency becomes insolvent or goes into liquidation.
- V. If the purchaser wishes to terminate the contract for its convenience

The purchaser may terminate the contract by giving **30 days' written notice** to the selected agency.

13. Arbitration and Legal Jurisdiction

- I. In case of any dispute arising out of the contract, both parties shall attempt to resolve the dispute amicably.
- II. If the dispute cannot be resolved through mutual consultation, it shall be referred to arbitration.
- III. The arbitration proceedings shall be conducted in accordance with the **Arbitration and Conciliation Act, 1996**.
- IV. The place of arbitration shall be **Patna**, and the language of arbitration shall be English.
- V. The courts at Patna shall have exclusive jurisdiction over matters related to this contract.
- VI. For any and all legal disputes arising out of or related to this RFP/Contract, the legal jurisdiction shall be exclusively of the Courts at Patna only.

14. Force Majeure Clause

- I. Neither party shall be liable for failure or delay in performance of its obligations if such failure or delay is due to events beyond reasonable control.
- II. Such events may include natural disasters, war, civil unrest, pandemics, government restrictions, or any other unforeseeable circumstances.
- III. The affected party shall notify the other party in writing within **7 days** of the occurrence of such event.

- IV. The obligations of the affected party shall be suspended for the duration of the Force Majeure event.

If the Force Majeure situation continues for more than **60 days**, either party may terminate the contract without penalty

15. Indemnity Clause

- I. The selected agency shall indemnify and hold harmless the purchaser against all claims, damages, losses, or expenses arising out of:
- Breach of contractual obligations.
 - Violation of intellectual property rights.
 - Negligence or misconduct by the agency or its personnel.
- II. The indemnity shall survive the termination or completion of the contract.

16. Bidder Eligibility (Pre-Qualification (PQ) and Technical Qualification (TQ) Criteria)

All bids will primarily be evaluated on the basis of Pre-qualification Criteria. The designated Committee of BSEDC will check the proposals with respect to tender fees, EMD, completeness etc among other things and carry out a detailed evaluation of the Proposals. Only those bidders, who qualify all Pre-qualification criteria, will be eligible for evaluation of their technical bids. Following are the pre-qualification criteria which a bidder must meet to qualify for the technical bid evaluation:

Sl. No	Particular	Document required
1.	The bidder must be a company registered in India for at least the past five years as of the bid submission date.	Certificate of incorporation
2.	The bidder must be a an empaneled security auditor agency of the Indian Computer Emergency Response Team (CERT-In) or STQC, having a valid empanelment certificate at the time of submission of the bid..	Valid CERT-In/STQC Empanelment Certificate
3.	Bidder should be registered with tax authorities	GST & PAN copies
4.	Average annual turnover of Rs. 1 Crore from Software Testing services provided to Government organisations/ PSU during any 3 of the last 3 financial years (i.e FY 2024-25, 2023-24 and 2022-23)	Extracts from audited financial statements, Balance Sheet, P&L, along with Certificate from Statutory Auditor/CA clearly showing the overall turnover and the turnover from Software Testing services in India.
5.	Overall average turnover must be Rs. 5 Crore in any 3 of the last 3 financial years (i.e FY 2024-25, 2023-24, 2022-23)	All statements / certificates should bear a valid UDIN

Sl. No	Particular	Document required
		number.
6.	Bidder has to submit self-certificate that the Bidder has not been blacklisted or suspended by the State Governments, Central Government or any other public Sector undertaking or a corporation or any other Autonomous organization of Central or State Government in India in the last 5 years	A Self declaration on company letter head with sign and stamp of authorized signatory
7.	Bidder must have completed at least one HRMS/ERP/e-Governance testing project in Government/PSU in last 5 years. , as follows: One completed project of Rupees 1.50 Cr. value OR Two completed project of Rupees 1.00 Cr. value OR Three completed project of Rupees 80 Lacs value	Copy of the Work Orders /Agreement/LOA and client issued Completion Certificate
8.	The Bidder shall have an operational office in Patna, Bihar , or shall submit an undertaking to establish a project office in Patna within 30 days after of issuance of Letter of Intent (LoI)	Government issued Address Proof/ Rent agreement
9.	Required Certifications: The bidder must possess following certifications: 1. Valid CERT-In/ STQC empanelment certificate 2. ISO 9001:2015 3. ISO 27001: 2013/2022 or ISO/IEC/IEEE 29119	Copy of valid Certifications.
10.	The bidder should have a Positive NetWorth in any 3 of the last 3 financial years (i.e. (FY 2024-25, 2023-24, 2022-23)	CA Certificate bearing a valid UDIN number.
11.	Power of Attorney in favor of the authorised bid signatory submitting tender on behalf of bidder	Notarised power of attorney on legal stamp paper.
12.	Minimum 50 software testing / QA / security assessment professionals on payroll services.	Self-Certificate by the HR department of bidder clarifying on roll employee

16.1 Technical Evaluation & scoring Model

Bidders who meet the pre-qualifications/eligibility requirements would be considered as qualified to move to the next stage of technical evaluation. The committee will examine and compare the technical aspect of the proposals on the basis of information provided by the bidder by taking into account the following scoring model. **Only the bidders securing minimum 75% score shall be eligible for commercial bid opening.**

Each bid will be assigned a technical score (S_T) as follows:

Sl. No	Criteria	Marking criteria	Max. Marks	Document required
1	Overall average turnover must be Rs. 5 Cr. in any 3	Total turnover: >=5 <= 10 Crs.- 14	20	Extracts from audited financial statements, Balance Sheet,

Sl. No	Criteria	Marking criteria	Max. Marks	Document required
	of the last 3 financial years (i.e FY 2024-25, 2023-24, 2022-23)	marks >10 <= 20 Crs.- 16 marks >20 Crs.- 20 marks		P&L, along with Certificate from Statutory Auditor/CA clearly showing the overall turnover and the turnover from Software Testing services provided to government/PSU customers in India.
2	Average annual turnover of Rs. 1 Cr. from Software Testing services provided to Government organisations/ PSU during any 3 of the last 3 financial years (i.e FY 2024-25, 2023-24 and 2022-23)	Turnover from software testing in government/PSU: >=1 <= 2 Crs.- 14 marks >2 <= 4 Crs.- 16 marks >4 Crs.- 20 marks	20	All statements / certificates should bear a valid UDIN number.
3	Bidder must have completed at least one HRMS/ERP/e-Governance testing project in Government/PSU in last 5 years. , as follows: One completed project of Rupees 1.50 Cr. value OR Two completed project of Rupees 1.00 Cr. value OR Three completed project of Rupees 80 Lacs value	Minimum quantity/ size of project(s)- 15 marks Additional 2 marks for every extra project qualifying as per RFP criteria (Max. 5 projects)	25	Copy of the Work Orders /Agreement/LOA and client issued Completion Certificate
4	The bidder should have at least 50 manpower on software testing / QA / security assessment professionals its payroll engaged in providing manpower/ payroll services to various clients.	50–100 = 11 Marks 101–150 = 13 Marks Above 150 = 15 Marks	15	Self-Certificate by the HR department of bidder clarifying on roll employee
5	Technical Presentation by the bidder before tender committee	The bidder must submit the proposed approach and methodology and work plan	20	Self-certified copy of proposed approach document (Technical Presentation will also be called up for those who fulfil the pre-qualification eligibility criteria)
		TOTAL	100	

Note: To be eligible for financial bid opening, a bidder must score a minimum of 75% marks in aforesaid technical evaluation stage.

16.2 Bid Rejection Criteria

Besides other conditions and terms highlighted in this RFP/ Tender Document, bids may be rejected under following circumstances:

(a) General rejection criteria

- i. Conditional Bids;
- ii. Non-complaint bids
- iii. If the information provided by the Bidder is found to be incorrect / unclear/ misleading / fraudulent at any stage / time during the Tendering Process;
- iv. Any effort on the part of a Bidder to influence the bid evaluation, bid comparison or contract award decisions;
- v. Bids without signature of person (s) duly authorized on required pages of the bid;
- vi. Bids without power of attorney/ board resolution.
- vii. Bids received without EMD, tender fee and other payments required by the RFP.
- viii. Any effort by the bidder to conceal/misrepresent information relevant to their profile and/or having bearing on the processing of this RFP.

(b) Pre-Qualification rejection criteria

- i. Bidders not complying with any one or more of the eligibility Criteria given in this RFP
- ii. Failure to furnish all information required by the Tender Document or submission of a bid not substantially responsive or clarification sought by BSEDC is not adequately addressed and furnished by the Bidder;
- iii. Failure to substantiate the claims made in technical bid documents as required by BSEDC

(c) Technical rejection criteria

- i. Bids not scoring minimum required technical evaluation marks/score.
- ii. Revelation of Prices in any form or by any reason before opening the Commercial Bid;
- iii. Failure to furnish all information required by the Tender Document or submission of a bid not substantially responsive to the Tender Document in every respect;
- iv. Bidders not quoting for the complete scope of Work as indicated in the Tender Documents, addendum (if any) and any subsequent information given to the Bidder;
- v. The Bidder not confirming unconditional acceptance of full responsibility of providing services in accordance with the Scope of work and Service Level Agreements of this tender

(d) Evaluation of financial bid/commercial bid

Commercial bids of those bidders who qualify for the pre-qualification bid evaluation will only be opened. All other Commercial bids will be returned un-opened. The final selection of bidder will be done based on **Lowest Commercial Cost** among the bidders qualified the pre-qualification criteria (i.e. the bid with the lowest commercial (L1) will be considered as the successful bidder.

Note:

- i. Financial Bid is to be submitted in the prescribed .xls format i.e., BoQ uploaded along with the RFP.
- ii. All the costs, expenses and tax liabilities associated with the assignment shall be included in the Financial Proposal. The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumptions and shall be final and binding. In case any assumptions or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.
- iii. It is further clarified that in no case the agency so appointed, will be entitled to payment beyond the fee quoted in the financial bid.
- iv. Discounts (if any), are to be included and adjusted within the quoted price and not to be mentioned separately anywhere in the bid.

(e) Commercial/Financial Bid Rejection Criteria

- i. Incomplete Financial Bid;
- ii. Financial Bids that do not conform to the Tender's Financial bid format;
- iii. If there is an arithmetic discrepancy in the Financial Bid calculations the Technical Committee shall rectify the same. If the Bidder does not accept the correction of the errors as directed by BSEDC, its bid may be rejected.

(f) Clarifications

If deemed necessary, BSEDC may seek clarifications on any aspect from the Bidder. However, that would not entitle the Bidder to change or cause any change in the substance of the tender submitted or price quoted. BSEDC may, if so desire, ask the Bidder to give a representation for the purpose of clarification of the tender. All expenses for this purpose, as also for the preparation of documents and other meetings, will be borne by the Bidders.

17. Bid Security/ Earnest Money Deposit (EMD)

The bidders must submit requisite EMD as per requirements of this RFP. The Bid security may be forfeited:

- I. If a Bidder withdraws/changes his Bid during the period of Bid validity.
- II. In case of a successful Bidder, if the Bidder fails to sign the contract agreement and furnish performance security (PBG) within given timeframe.

Exemption for MSEs/Startups: Micro and Small Enterprises (MSEs) registered under Udyam Registration and Startups recognized by the Department for Promotion of Industry and Internal Trade (DPIIT), Government of India, shall be exempted from payment of Tender Fee, Tender Processing Fee and Earnest Money Deposit (EMD), subject to production of a valid Udyam Registration Certificate/DPIIT recognition certificate and subject to the bidder meeting the prescribed quality and technical specifications, in terms of the Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 and Rule 170 of the General Financial Rules, 2017. No exemption shall be available in respect of the requirement for Bidder to have the requisite experience and turnover criteria specified elsewhere in this RFP.

Refund of EMD: The EMD of unsuccessful Bidders shall be refunded/released within 30 (thirty) days of issuance of the Letter of Intent (LoI) to the successful Bidder. No interest shall

be payable by BSEDC on the EMD or Performance Security under any circumstances. Bidders may also obtain further information from the address :
 Managing Director,
 Bihar State Electronics Development Corporation Ltd.,
 BELTRON Bhawan, Shastri Nagar, Patna 800023

18. Performance Security (Performance Bank Guarantee-PBG)

- I. A Bidder, on being selected as the Successful bidder, will be required to furnish a performance security deposit in the form of a Bank Guarantee, which shall be equivalent to amount of 10% of the project cost as approved by Beltron. Only after deposit of PBG, the contract agreement will be signed with the selected bidder. The Performance Bank Guarantee must be issued by a nationalized/scheduled commercial bank in favor of Bihar State Electronics Development Corporation Limited and should be payable at Patna.
- II. The PBG shall be in prescribed format given in this RFP, within stipulated timeframe.
- III. The PBG must remain valid for a period of upto 90 days, after the expiry of contract.
- IV. If the selected Bidder does not furnish the Performance Security within specified timeframe, then the Bid security furnished by such Bidder may be forfeited.
- V. If the successful Bidder fails to perform any contractual obligation specified in the MSA/RFP/Purchase order/LoI, the Performance Security will be forfeited & the contract will be canceled.

19. Project Timeline/Schedule and Penalty Details

The Bidder has to complete the end-to-end testing in a total of 24 Weeks after signing of contract and subject to penalties as mentioned below:

Activity & Deliverables	Duration / Time Limit	Payment %	Penalty
Requirement Gathering, Stakeholder Consultation, PRD Preparation, Functional Testing & Integration Testing and submission of Consolidated Functional & Integration Test Report	8 Weeks	20%	Delay beyond timeline shall attract a penalty of ₹10,000 per day or 0.5% of Contract Value (whichever is higher) till submission.
Functional & Integration Bug Fix by SDA	2 Weeks	N/A	N/A

Functional & Integration Re-testing and submission of Re-test Report	2 Weeks	10%	₹10,000 per day or 0.5% of Contract Value (whichever is higher).
Performance Testing and submission of Performance Test Report	2 Weeks	15%	₹10,000 per day or 0.5% of Contract Value (whichever is higher).
Performance Fix by SDA Performance Re-testing and submission of Re-test Report	2 Week	10%	₹10,000 per day or 0.5% of Contract Value (whichever is higher).
Security Testing (VAPT) and submission of Security Audit Report	2 Weeks	15%	₹10,000 per day or 0.5% of Contract Value (whichever is higher).
Security Fix by SDA , Security Re-testing and submission of Final Security Clearance Report	2 Week	10%	₹10,000 per day or 0.5% of Contract Value (whichever is higher).
UAT Support, UAT Sign-off and Closure Report	2 Weeks	10%	₹10,000 per day or 0.5% of Contract Value (whichever is higher).
Go-Live Readiness Certification and Final Project Closure Report	2 Weeks	10%	₹10,000 per day or 1% of Contract Value (whichever is higher).
Total	24 Weeks	100%	

Cap on Penalty/Liquidated Damages: Notwithstanding anything contained in this Section, the cumulative penalty/liquidated damages leviable under this RFP/Contract, across all milestones, shall not exceed 10% (ten percent) of the Total Contract Value. In the event delays or non-performance persist beyond the point at which the cumulative penalty reaches this ceiling, BSEDC reserves the right, without prejudice to any other remedy available under the Contract, to terminate the Contract, forfeit the Performance Security, and take further action including blacklisting/debarment of the Testing Agency as per applicable rules.

Penalty for Non-Deployment / Late Deployment of Resources

The bidder shall ensure deployment of the Four mandatory onsite resources throughout the contract period. Hybrid and specialist resources may operate remotely and shall attend meetings physically or virtually as directed by BSEDC. Penalty for non-deployment shall apply only to mandatory onsite resources and phase-specific specialist resources during their designated testing phases

The penalties for the manpower will be imposed starting from the 15th day after signing of the contract.

20. Bidding Costs

The Bidder shall bear all costs associated with the preparation and submission of its proposal, and the Bihar State Electronics Development Corporation Limited, will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bid process.

21. Language of Proposal

The Proposal prepared by the Bidder and all correspondence and documents relating to the Bid exchanged by the Bidder and the Bihar State Electronics Development Corporation Limited shall be written in English language only.

22. Amendment of Bid Documents

At any time prior to the deadline for submission of Bids, BSEDC, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid Documents through amendment/s. BSEDC will upload the amendment/s on <https://www.eproc2.bihar.gov.in>. Such amendment/s will be binding to bidders.

23. Bid Extension, if any

Bihar State Electronics Development Corporation Limited may extend the deadline for the submission of Proposal, in order to allow prospective Bidders a reasonable time in which to take the amendment into account in preparing their Proposal.

24. Appointment of the Committee

- I. The Committee of Bihar State Electronics Development Corporation Limited will evaluate the Bids.
- II. Committee's decision would be binding on the Bidder.

25. Payment Terms

- I. Bihar State Electronics Development Corporation Limited will release payment to selected bidder on achievement of payment milestone, after deduction of applicable penalties, levies, taxes and other liabilities (if any).
- II. Payment will be released after successful completion of work, submission of necessary certificate and reports only.
- III. No advance payment will be released
- IV. No claim on account of any price variation / escalation shall be entertained

26. E-Procurement Process Related Instructions

Submission of Proposals (Through electronic mode only)

- I. The Bidder shall submit his bid/ tender on e-Procurement 2.0 platform at <https://eproc2.bihar.gov.in>.
- II. The Bidder must have the Class II/III Digital Signature Certificate (DSC) and e-Tendering User-id of the e-Procurement website before participating in the e-tendering process. The Bidder may use their DSC if they already have the DSC. They can also take DSC from any of the authorized agencies. For user-id they have to get registered themselves on e- procurement website <https://eproc2.bihar.gov.in> and submit their bids online on the same. Offline bids shall not be entertained by the Tender Inviting Authority for the tenders published in e-Procurement 2.0 platform.
- III. The Bidders shall submit their eligibility and qualification details, technical bid, Financial bid etc., in the online standard formats given in e-Procurement 2.0 website. The Bidders shall upload the scanned copies of all the relevant certificates, documents etc., in support of their eligibility criteria / technical bids and other certificate /documents in the e- Procurement 2.0 web site. The Bidder shall digitally sign on the supporting statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity. The Bidder shall attach all the required documents for the specific tender after uploading the same during the bid submission as per the tender notice and bid document.
- IV. All the required documents should be attached at the proper place as mentioned in the e-forms otherwise the tender of the Bidder will be rejected.
- V. Tender Processing Fee (TPF) to be paid through e-Payment mode (i.e., NEFT / RTGS, Net Banking, Credit / Debit Card) only.
- VI. Cost of BOQ/ Form Fee to be paid through e-Payment mode (i.e., NEFT / RTGS, Net Banking, Credit / Debit Card) only.
- VII. "Earnest Money Deposit (EMD) can be paid either through online mode or via Bank guarantee as mentioned in the RFP.

VIII. The tender opening will be done online only.

IX. Any corrigendum or date extension notice will be given on the e-Procurement website only.

X. For support related to e-tendering process, Bidders may contact at mentioned below:

Toll Free No. 1800 572 6571,

Email Id: - eproc2support@bihar.gov.in

Note: "Bids along with necessary online payments must be submitted through e-Procurement portal <https://eproc2.bihar.gov.in> before the date and time specified in the NIT/RFP. The department/Tendering Authority doesn't take any responsibility for the delay / Non-Submission of Tender / Non-Reconciliation of online Payment caused due to Non-availability of Internet Connection, Network Traffic / Holidays or any other reason.

ANNEXURES

Annexure 1: Detail Scope of Work

1. EXECUTIVE SUMMARY

Scope of work for the Human Resources Management System (HRMS) being implemented for the Government of Bihar. The testing services encompass Functional Testing, Performance Testing, and Security Testing to ensure the system meets all specified requirements and is production-ready for approximately 8 lakh employees (approximately)

A. The testing agency shall be responsible for:

- Designing comprehensive unique test case across all testing types
- Executing tests according to defined test strategies
- Workflow and Government rule Validation for all the functionalities of the application
- Reporting defects and ensuring resolution by Software solution provider through re-test of the modules
- Certifying the application as "ready for production use
- Providing all necessary testing documentation

B. Requirement Gathering Responsibility of the Testing Agency

I. Requirement Understanding and Stakeholder Consultation

The selected Software Testing / System Audit Agency shall be responsible for **comprehensive requirement understanding and validation** of the **HRMS (Human Resource Management System)** application.

For this purpose, the agency shall undertake **requirement gathering activities through consultation with concerned departments and stakeholders** of the Government of Bihar.

The agency shall coordinate with officials from various departments to:

- Understand the **functional workflow and operational processes** of HRMS modules.
- Identify **expected system behavior and business rules** for each module.
- Validate **functional requirements and process alignment** with departmental practices.
- Capture **module-wise testing scenarios and user expectations**.

The agency shall prepare a **Project Requirement Document (PRD)** or **Functional Understanding Report** based on these consultations, which shall form the basis for preparation of test cases.

II. Department Visits for Requirement Gathering

The Software Testing Agency shall conduct **physical meeting with concerned departments** to understand the operational usage of the HRMS application.

The agency shall:

Visit the identified departments as required for understanding **department-specific HRMS workflows**.

Interact with **designated nodal officers, HR officials, and system users** to capture functional and operational requirements.

Document **module-wise user expectations and operational dependencies**.

Ensure that the testing approach adequately reflects **actual user scenarios and system usage patterns**.

All visits and stakeholder interactions shall be **coordinated through** Bihar State Electronics Development Corporation Limited (BSEDC) or the concerned department.

III. Availability of User Manuals

The **User Manuals and functional documentation for different HRMS modules** shall be provided to the selected Software Testing Agency by Bihar State Electronics Development Corporation Limited (BSEDC).

The Testing Agency shall review these documents to:

- Understand the **functional scope of each HRMS module**
- Prepare **test scenarios and test cases**
- Validate system functionality against documented processes

IV. Responsibility of the Testing Agency

The Software Testing Agency shall be fully responsible for:

- Studying the **user manuals and project documentation**
- Conducting **stakeholder consultations and departmental interactions**
- Preparing **comprehensive test scenarios based on real operational workflows**
- Ensuring that the testing process covers **all functional modules of HRMS**

2. FUNCTIONAL TESTING SCOPE

2.1. Objectives

- Validate that all functional requirements specified in the RFP of the HRMS project are implemented correctly.
- Ensure business process workflows operate as intended
- Verify data accuracy and integrity across all modules
- Validate integration points between modules
- Confirm GIGW compliance for all web-based functionalities

2.2. Functional Testing Coverage

- **Requirement Traceability Matrix (RTM):** Map test cases to RFP requirements for HRMS application.
- **Test Case Design & Execution:** Cover positive, negative, boundary, and exception scenarios.
- **Integration Testing:** Validate interfaces with CFMS, Aadhaar APIs, Recruitment Agencies.
- **Regression Testing:** Ensure stability after fixes and enhancements.
- **Compliance Testing:** Verify GIGW compliance accessibility features, and security standards.
- Workflow and Government rule Validation for all the functionalities of the application
 - The implementing agency should be responsible to visit the Departments to understand the workflow and Government rules for all the features of the application
- **Role based Access Testing**
 - Data Import/Export and Report Validation
 - UAT Support

2.2.1. Application Development & Standards

Test Categories:

- GIGW Compliance Testing
 - Accessibility standards (WCAG 2.0 Level A compliance minimum)
 - Government identity and branding elements
 - Mandatory content and functionality (Feedback, Help, Search, Sitemap)
 - Bilingual support (English and Hindi in UNICODE)

- Responsive Web Design Testing
 - Browser compatibility (Internet Explorer, Mozilla Firefox, Chrome, Safari)
 - Form factor responsiveness across devices
 - Mobile responsiveness testing
- Data Import/Export Testing
 - MS Office formats (Word, Excel)
 - Open Office formats
 - PDF generation and parsing
 - XML data exchange
 - Excel/PDF upload validation

Test Case Design Requirements:

- Minimum 50 unique test case for GIGW compliance
- Minimum 100 unique test case for browser/device compatibility
- Minimum 75 unique test case for data import/export functionality

2.2.2. Cadre Management Module

Test Categories:

- Managing Cadre Schedule
 - Service definition and configuration
 - Reserve definition and allocation
 - Recruitment rules configuration
 - Cadre management rules setup
 - Probation period and examination mapping
- Gradation List Management
 - Dynamic gradation list updates
 - Entry through various channels (recruitment, promotion, rehabilitation, validation)
- Disposition List Management
 - Automated disposition list generation

- Comparison with scheduled cadre positions

Test Case Design Requirements:

- Minimum 150 unique test case covering all cadre management functions
- 50 unique test case for methods of entering into service
- 75 unique test case for gradation and disposition list accuracy

2.2.3. Interface for Recruitment Agencies

Test Categories:

- Vacancy requisition workflow
- Requisition visibility to recruitment agencies (BPSC, BSSC, BTSC, Police Selection Board, SSC)
- API Integration with recruitment agency to transfer data from the recruitment agency application to HRMS application for on boarding of the employees in the HRMS system
- Recommendation publication
- Certificate and police verification
- Appointment letter generation
- Joining process workflow
- Biometric registration

Test Case Design Requirements:

- Minimum 100 unique test case for end-to-end recruitment workflow
- 50 unique test case for each recruitment agency interface
- 25 unique test case for joining and biometric registration

2.2.4. Enrollment for Pension

Test Categories:

- Nominee declaration
- Premium calculation and recording
- E passbook generation
- PRAN/GPF number issuance
- Integration with NSDL for PRAN

Test Case Design Requirements:

- Minimum 80 unique test case for pension and insurance workflows

- 40 unique test case for premium calculations
- 30 unique test case for passbook and number issuance

2.2.5. Training, Examination & Confirmation

Test Categories:

- Training schedule and enrollment
- Field training recording
- Departmental examination workflow
- Certificate recording
- Computer proficiency test
- Service confirmation process
- Probation extension workflow

Test Case Design Requirements:

- Minimum 120 unique test case for training workflows
- 60 unique test case for examination processes
- 40 unique test case for confirmation process

2.2.6. Performance Appraisal System

Test Categories:

- Reporting hierarchy mapping
- Self-appraisal submission
- Reporting, reviewing, and accepting authority workflows
- Alert mechanisms
- Part-year appraisal on transfer
- Performance appraisal report storage
- Service verification
- Digital signature integration

Test Case Design Requirements:

- Minimum 100 unique test case for appraisal workflows
- 50 unique test case for verification processes

- 25 unique test case for alert mechanisms

2.2.7. Pay Management

Test Categories:

- Increment processing (annual, automatic)
- Pay revision
- Pay fixation (promotion, leave return)
- Step-up of pay
- Pay entitlements (deputation repatriation)
- Allowance management
- Pay verification
- Service Verification

Test Case Design Requirements:

- Minimum 150 unique test case for pay management
- 75 unique test case for various allowance types
- 50 unique test case for pay verification

2.2.8. Loan & Recovery Management

Test Categories:

- Loan application workflow (Festival Advance, GPF Loan, HBA, Car Loan, Motor Cycle Loan)
- Loan sanction process
- Release of loan (full/installments)
- Repayment tracking
- Methodology to calculate Installment
- Automatic deduction cessation
- Integration with payroll

Test Case Design Requirements:

- Minimum 100 unique test case for loan workflows
- 50 unique test case for each loan type
- 40 unique test case for repayment calculations

2.2.9. Transfer, Posting & Deputation Management

Test Categories:

- Transfer policy configuration
- Transfer request handling
- Transfer order generation
- Relieving process (Form 202)
- Joining in new office
- Pay slip issuance by AG/Personal Claim Cell
- Un-availed joining time calculation
- Joining time extension
- Deputation workflows
- AG endorsements (PC, LSC)
- Repatriation
- Posting orders
- Officiating assignments
- Additional charge management

Test Case Design Requirements:

- Minimum 200 unique test case for transfer/posting workflows
- 100 unique test case for deputation processes
- 50 unique test case for time calculations and extensions

2.2.10. Promotion & Selection

Test Categories:

- Eligibility calculation
- Vacancy availability checking
- PAR integration
- Vigilance clearance
- Committee recommendation recording
- Promotion order issuance

- Acceptance/foregoing workflow
- Selection process

Test Case Design Requirements:

- Minimum 120 unique test case for promotion workflows
- 60 unique test case for selection processes
- 40 unique test case for committee decision support

2.2.11. Leave Management

Test Categories:

- Leave rule configuration (Earned Leave, Half Pay Leave, Commuted Leave, Leave Not Due, Extraordinary Leave, Casual Leave)
- Calendar management (state, department, local, employee-specific)
- Opening balance entry
- Periodic credit automation
- Vacation detention
- Leave application and sanction
- Leave availing and resumption
- Headquarters leaving permission
- Leave surrender
- Absence from duty and regularization
- Break in service
- Leave account generation
- LTC sanction and settlement

Test Case Design Requirements:

- Minimum 250 unique test case for leave management
- 100 unique test case for different leave types and rules
- 75 unique test case for calendar management
- 50 unique test case for LTC processes

2.2.12. Change Request of Personal Information

Test Categories:

- Update request submission
- Approval workflow
- History maintenance
- Service book automatic update

Test Case Design Requirements:

- Minimum 40 unique test case for change request workflows

2.2.13. Reward/Appreciation**Test Categories:**

- Reward recording (Cash, Commendation, Medal)
- Service book integration

Test Case Design Requirements:

- Minimum 30 unique test case for reward management

2.2.14. Attendance System Module, if implemented during the contract period, shall be tested as per applicable scope.**Test Categories:**

- Biometric integration (offline and online modes)
- Manual absentee statement entry
- Monthly timesheet generation
- Payroll integration
- MIS report generation

Test Case Design Requirements:

- Minimum 80 unique test case for attendance workflows
- 40 unique test case for biometric integration
- 30 unique test case for report generation

2.2.15. Disciplinary Proceeding**Test Categories:**

- Initiation of proceedings
- Show cause notice issuance
- Compliance receipt
- Hearing scheduling and recording
- Administrative actions (Pay Held-Up)

- Suspension workflow
- Reinstatement
- Conclusion and punishment recording

Test Case Design Requirements:

- Minimum 120 unique test case for disciplinary workflows
- 50 unique test case for suspension/reinstatement
- 40 unique test case for various punishment types

2.2.16. Exit Management

Test Categories:

- Superannuation processing
- Retirement alerts and notifications
- Pension paper processing (24-month workflow)
- Document submission and verification
- No Due Certificate processing
- Sanction order generation
- Payment authorities
- Bill preparation
- Termination, resignation, voluntary retirement, demise workflows

Test Case Design Requirements:

- Minimum 150 unique test case for exit management
- 100 unique test case for pension processing
- 50 unique test case for various exit types

2.2.17. Employee Portal

Test Categories:

- Personalized page functionality
- Notifications and intimations
- To-Do list management
- Calendar functionality

- Address book
- Report generation (Pay Slip, Service Book, Service Register, Leave Account, Insurance Passbook, Loan Accounts, GPF, Tax accounts)
- Request submissions (all types)
- Role-based access control

Test Case Design Requirements:

- Minimum 200 unique test case for employee portal
- 100 unique test case for various request types
- 50 unique test case for report generation

2.2.18. HR Manager Portal

Test Categories:

- Employee list and search
- HR transaction management
- Office proposal initiation
- Calendar management
- Bulletin board services
- E-Service book access
- Service transaction recording

Test Case Design Requirements:

- Minimum 150 unique test casefor HR manager portal
- 75 unique test casefor transaction management
- 50 unique test casefor proposal workflows

2.2.19. Payroll Management

Test Categories:

- Chart of account configuration
- Allowance and deduction management
- Formula editor functionality
- Loan and recovery integration
- Income tax calculation
- Form-16 generation

- Draft and final bill preparation (16 types of bills)
- Bill validation
- Monthly salary bill generation
- Arrear bill generation
- Loan advance bills
- Pension and retirement bills
- Contractual employee bills
- E-pay slip generation
- Annual salary statement

Test Case Design Requirements:

- Minimum 300 unique test case for payroll management
- 150 unique test case for bill preparation and validation, check all the component of bill
- 100 unique test case for various bill types
- 50 unique test case for tax calculations

2.2.20. Integration with CFMS

Test Categories:

- interface testing
- Bill submission workflow
- Bill validation (all validation rules)
- Status updates and error handling
- Bill resubmission
- NPS calculation
- API integration

Test Case Design Requirements:

- Minimum 200 unique test case for CFMS integration
- 100 unique test case for bill validation rules
- 75 unique test case for error handling and resubmission

2.2.21. Travel & Entitlement Claim Management

Test Categories:

- Travel policy management
- Travel plan approval

- Travel advance processing
- Pre-travel reminders
- Claim settlement
- Entitlement calculation

Test Case Design Requirements:

- Minimum 100 unique test case for travel management
- 50 unique test case for claim processing
- 30 unique test case for policy enforcement

2.2.22. State Vigilance Interface

Test Categories:

- Case recording
- Case closure
- Employee search and service record viewing

Test Case Design Requirements:

- Minimum 40 unique test case for vigilance interface

2.2.23. Ad-hoc Reporting & Query Builder

Test Categories:

- Query builder functionality
- Custom filter application
- Report saving and retrieval
- Export to multiple formats
- Role-based data access
- Jurisdiction-based filtering

Test Case Design Requirements:

- Minimum 80 unique test case for query builder
- 40 unique test case for export functionality
- 30 unique test case for access control

2.2.24. Mobile Application

Test Categories:

- Leave status checking and application

- Leave approval
- LTC application and claim submission
- Service details viewing
- Form factor responsiveness
- Offline functionality (if applicable)
- Push notifications

Test Case Design Requirements:

- Minimum 100 unique test case for mobile application
- 50 unique test case for offline/online synchronization
- 30 unique test case for notifications

2.3. Integration Testing

Test Categories:

- Module-to-module integration
- HRMS to CFMS integration
- HRMS to NSDL integration
- HRMS to Recruitment Agency
- Third-party service integrations

Test Case Design Requirements:

- Minimum 200 unique test case for integration scenarios
- 100 unique test case for CFMS integration
- 50 unique test case for external system integrations

2.4. Data Migration Testing

Test Categories:

- Data extraction from legacy systems
- Data transformation and mapping
- Data loading and validation
- Data reconciliation
- Historical data integrity

Test Case Design Requirements:

- Minimum 150 unique test case for data migration
- 100 unique test casefor data reconciliation
- 50 unique test casefor data integrity

2.5. Functional Testing Deliverables

1. **Test Strategy Document** - Comprehensive approach for functional testing with details about the requirement gathering process to understand each module of the application to test that application is designed as per the Process flow of the Government.
2. **Test Plan** - Detailed schedule and resource allocation
3. **Test Case Design Specifications** - test case covering all modules and check all type of functionalities
4. **Test Case Execution Reports** - Daily/weekly execution status
5. **Defect Reports** - Detailed defect logs with severity classification

Severity Level	Description
Critical	System crash, security breach, or major functionality failure
High	Major feature not working
Medium	Partial functionality issue
Low	Minor UI or usability issue

6. **Test Summary Reports** - Module-wise and overall summary
7. **Requirements Traceability Matrix (RTM)** - Linking requirements to test cases
8. **User Acceptance Test (UAT) Support Documentation**
9. **Functional Test Sign-off Report** - Certifying functional readiness

3. PERFORMANCE TESTING SCOPE

3.1. Objectives

- Validate system performance under expected and peak load conditions
- Identify performance bottlenecks
- Ensure response times meet user expectations
- Validate system scalability

- Test system stability under sustained load
- Verify database performance
- Assess network bandwidth requirements

3.2. Performance Testing Coverage

3.2.1. Load Testing

Test Scenarios:

- **Concurrent User Load:**
 - Peak Load: 15,000 users;
 - Stress Load: 25,000 users; acceptance as per defined test category.
- **Transaction Volume:**
 - Salary bill processing: All employees monthly
 - Leave applications: 10,000 per day during peak periods
 - Attendance data: All employees record daily
 - Pay slip generation: All employees, per month
- **Critical Transaction Performance:**
 - Login response time: < 3 seconds (95th percentile)
 - Dashboard loading: < 5 seconds
 - Service book generation: < 10 seconds
 - Pay slip generation: < 8 seconds
 - Bill submission to CFMS: < 15 seconds
 - Leave application submission: < 4 seconds
 - Report generation: < 15 seconds (standard reports)
 - Search operations: < 3 seconds

Test Case Design Requirements:

- Minimum 100 load test scenarios
- 50 scenarios for peak load conditions
- 30 scenarios for normal operations

3.2.2. Stress Testing

Test Scenarios:

- System behavior beyond maximum capacity
- Resource exhaustion scenarios
- Recovery after system overload
- Database connection pool exhaustion
- Memory leak detection
- Failover and recovery testing

Test Case Design Requirements:

- Minimum 50 stress test scenarios
- 25 scenarios for resource exhaustion
- 25 scenarios for recovery testing

3.2.3. Endurance/Soak Testing

Test Scenarios:

- 72-hour continuous operation under normal load
- Memory consumption over extended periods
- Database growth patterns
- Log file management
- Connection leak detection
- Performance degradation over time

Test Case Design Requirements:

- Minimum 20 endurance test scenarios
- 10 scenarios for 72-hour tests
- 10 scenarios for resource monitoring

3.2.4. Spike Testing

Test Scenarios:

- Sudden increase in user load (salary processing day)
- Month-end processing spike
- Year-end processing spike
- Increment processing (annual)
- Pay revision implementation

- System behavior during data migration

Test Case Design Requirements:

- Minimum 30 spike test scenarios

3.2.5. Scalability Testing

Test Scenarios:

- Horizontal scalability (adding more servers)
- Vertical scalability (increasing server resources)
- Database scalability
- Load balancer effectiveness
- Auto-scaling validation (if applicable)

Test Case Design Requirements:

- Minimum 40 scalability test scenarios

3.2.6. Database Performance Testing

Test Scenarios:

- Query response times
- Index effectiveness
- Stored procedure performance
- Database connection pooling
- Backup and restore operations
- Archival processes
- Database growth projections

Test Case Design Requirements:

- Minimum 80 database performance scenarios

3.2.7. Network Performance Testing

Test Scenarios:

- Bandwidth requirements under various loads
- Network latency impact
- Geographic distribution performance (state-wide deployment)
- VPN performance (if applicable)
- CFMS integration network performance

Test Case Design Requirements:

- Minimum 40 network performance scenarios

3.2.8. Batch Processing Performance

Test Scenarios:

- Monthly salary processing for 3,65,000 employees
- Annual increment processing
- Bulk bill generation
- Report generation (large datasets)
- Data export operations
- Backup operations

Test Case Design Requirements:

- Minimum 50 batch processing scenarios

3.3. Performance Testing Tools

Recommended Tools:

- Apache JMeter (open-source preferred for government projects)/ Load Runner / Galting / or any other tools
- Database performance tools (specific to selected RDBMS)
- Application Performance Monitoring (APM) tools

3.4. Performance Testing Environment

Requirements:

- Production-like environment configuration
- Representative data volume (at least 50% of expected production data)
- Network configuration similar to production
- All integrated systems available (CFMS test environment)

3.5. Performance Benchmarks

System-wide Metrics:

- System availability: 99.5% minimum
- Average response time: < 3 seconds for 90% of transactions
- Error rate: < 0.1% under normal load
- Throughput: Minimum 1,000 transactions per second
- Database query time: < 2 seconds for 95% of queries

3.6. Performance Testing Deliverables

1. **Performance Test Strategy** - Approach and methodology
2. **Performance Test Plan** - Detailed scenarios and schedule
3. **Performance Test Scripts** - Automated test scripts for all scenarios
4. **Load Profile Documents** - User load distribution models
5. **Performance Test Results** - Detailed results for all test types
6. **Performance Bottleneck Analysis Report**
7. **Capacity Planning Report** - Projections and recommendations
8. **Performance Tuning Recommendations**
9. **Performance Benchmark Report**
10. **Performance Test Sign-off Report**

4. SECURITY TESTING SCOPE

4.1. Objectives

- Identify security vulnerabilities in the application
- Ensure compliance with security standards and guidelines for e-Gov application
- e-Gov apps must be **secure to log in, protect data, restrict access, regularly checked for risks, and ready to recover quickly** if something goes wrong.
- Validate authentication and authorization mechanisms
- Test data encryption and protection
- Verify secure integration with external systems
- Assess application resilience against common attacks
- Ensure GIGW security compliance
- Validate audit trail and logging mechanisms

4.2. Security Testing Coverage

4.2.1. Vulnerability Assessment

Test Categories:

- **OWASP (Open Worldwide Application Security Project.) Top 10 Vulnerabilities:**
 - I. Injection flaws (SQL, LDAP, XML, OS command)
 - II. Broken authentication
 - III. Sensitive data exposure

- IV. XML external entities (XXE)
- V. Broken access control
- VI. Security misconfiguration
- VII. Cross-site scripting (XSS)
- VIII. Insecure deserialization
- IX. Using components with known vulnerabilities
- X. Insufficient logging and monitoring

Test Case Design Requirements:

- Minimum 200 unique test case for OWASP Top 10
- 100 unique test case for injection vulnerabilities
- 50 unique test case for authentication/authorization

4.2.2. Authentication & Authorization Testing

Test Categories:

- Password policy enforcement
- Session management
- Role-based access control (RBAC)
- Privilege escalation attempts
- Multi-factor authentication (if implemented)
- Account lockout mechanisms
- Password recovery security
- Token-based authentication

Test Case Design Requirements:

- Minimum 150 unique test case for authentication
- 100 unique test case for authorization
- 50 unique test case for session management

4.2.3. Data Security Testing

Test Categories:

- Data encryption in transit (SSL/TLS)
- Data encryption at rest
- Sensitive data masking

- PII (Personally Identifiable Information) protection
- Database encryption
- Secure file uploads
- Secure data transmission to CFMS
- Backup data security
- Data sanitization

Test Case Design Requirements:

- Minimum 120 unique test case for data security
- 60 unique test case for encryption
- 40 unique test case for PII protection

4.2.4. Input Validation Testing

Test Categories:

- Form input validation
- File upload validation
- API input validation
- SQL injection prevention
- Cross-site scripting prevention
- Command injection prevention
- Path traversal prevention
- Buffer overflow protection

Test Case Design Requirements:

- Minimum 200 unique test case for input validation
- 100 unique test case for file uploads
- 50 unique test case for API security

4.2.5. Network Security Testing

Test Categories:

- Firewall configuration
- IPS/IDS effectiveness
- Secure communication protocols

- Port scanning and open port analysis
- Network segmentation
- DDoS protection mechanisms
- VPN security (if applicable)

Test Case Design Requirements:

- Minimum 80 unique test case for network security

4.2.6. Web Service Security Testing

Test Categories:

- SOAP/REST API security
- API authentication
- API authorization
- API rate limiting
- Web service encryption
- CFMS integration security
- NSDL integration security
- XML/JSON security

Test Case Design Requirements:

- Minimum 100 unique test case for web service security
- 50 unique test case for CFMS integration security

4.2.7. Security Configuration Testing

Test Categories:

- Server hardening
- Default credential testing
- Unnecessary service identification
- Error message disclosure
- Directory listing
- Security header validation
- CORS policy validation
- Cookie security attributes

Test Case Design Requirements:

- Minimum 80 unique test case for security configuration

4.2.8. Audit Trail & Logging Testing**Test Categories:**

- Transaction log completeness
- Audit trail integrity
- Log tampering protection
- Sensitive operation logging
- User activity logging
- Administrator action logging
- Log retention policy
- Log analysis and monitoring

Test Case Design Requirements:

- Minimum 100 unique test case for audit and logging

4.2.9. Mobile Application Security Testing**Test Categories:**

- Mobile app encryption
- Secure data storage on device
- API communication security
- Token storage security
- App reverse engineering protection
- Certificate pinning
- Jailbreak/root detection

Test Case Design Requirements:

- Minimum 80 unique test case for mobile security

4.2.10. Penetration Testing**Test Categories:**

- Black box penetration testing
- Gray box penetration testing
- Social engineering attempts
- Privilege escalation

- Lateral movement
- Data exfiltration attempts
- Denial of service attacks
- Man-in-the-middle attacks

Test Case Design Requirements:

- Minimum 100 penetration test scenarios

4.2.11. Compliance Testing

Test Categories:

- GIGW security guidelines
- Information Security Policy compliance
- Data Privacy Act compliance
- RTI Act compliance (appropriate data access controls)
- Government security standards
- Cyber security audit readiness

Test Case Design Requirements:

- Minimum 60 unique test case for compliance

4.2.12. Security Code Review

Activities:

- Manual code review for security vulnerabilities
- Automated static code analysis
- Third-party library vulnerability scanning
- Secure coding standard compliance
- Hardcoded credential detection
- Cryptographic implementation review

Test Case Design Requirements:

- Minimum 50 code review scenarios

4.3. Security Testing Tools

Recommended Tools:

- **Vulnerability Scanners:**
 - Any tools
- **Static Code Analysis:**

- Any tools
- **Network Security:**
- **Web Service Testing through tools**
- **Mobile Security through tools**

4.4. Security Testing Approach

Methodology:

1. Phase 1: Automated Scanning

- Vulnerability assessment using automated tools
- Static code analysis
- Dependency vulnerability scanning

2. Phase 2: Manual Testing

- Manual security test case execution
- Authentication and authorization testing
- Business logic/ Process flow security testing

3. Phase 3: Penetration Testing

- Simulated attacks
- Exploitation of identified vulnerabilities
- Post-exploitation assessment

4. Phase 4: Security Audit

- Compliance verification
- Security configuration review
- Documentation review

4.5. Security Testing Deliverables

1. **Security Test Strategy** - Approach and methodology
2. **Security Test Plan** - Detailed test scenarios and schedule
3. **Vulnerability Assessment Report** - Automated scan results
4. **Security Test Case Specifications** - security test cases
5. **Penetration Test Report** - Detailed findings and exploitation attempts
6. **Security Code Review Report**
7. **Compliance Assessment Report**
8. **Security Risk Assessment**
9. **Security Recommendations and Remediation Plan**

10. Security Test Sign-off Report

11. Security Audit Support Documentation

5. TEST ENVIRONMENT & INFRASTRUCTURE

5.1. Test Environment Requirements

Infrastructure:

- Dedicated test environment separate from development and production
- Mirroring production architecture
- Test data management environment
- Integration environment for CFMS testing
- Mobile application

Data Requirements:

- Test data covering all scenarios
- Minimum 80% of production data volume for performance testing
- Anonymized production data for realistic testing
- Synthetic data generation for edge cases
- Test data for all employee profiles

5.2. Test Tools & Licenses

Required Tools:

- Test management tool
- Defect tracking tool
- Automated testing tools
- Performance testing tools
- Security testing tools
- Test data management tools
- Version control system integration

6. TEST EXECUTION APPROACH

6.1. Test Phases

Phase 1: Unit Testing

- Developer responsibility
- Code coverage minimum 80%
- Test results submission to QA team

Phase 2: Component Testing

- Individual module testing
- Module integration points testing

Phase 3: Integration Testing

- Module-to-module integration
- External system integration

Phase 4: System Testing

- End-to-end business process testing
- All modules integrated

Phase 5: Performance Testing

- Load, stress, endurance, spike testing
- Performance optimization

Phase 6: Security Testing

- Vulnerability assessment
- Penetration testing
- Security audit

Phase 7: User Acceptance Testing (UAT)

- Support to government UAT team
- Issue resolution
- UAT sign-off support

Phase 8: Regression Testing

- After each defect fix
- Before each release
- Automated regression suite

6.2. Defect Management**Defect Severity Classification:**

- **Critical:** System crash, data loss, security breach
- **High:** Major functionality not working, incorrect calculations
- **Medium:** Minor functionality issues, usability problems
- **Low:** Cosmetic issues, minor UI problems

Defect Metrics:

- Defect density
- Defect removal efficiency
- Defect aging
- Defect root cause analysis

6.3. Test Entry and Exit Criteria

Entry Criteria:

- Test plan approved
- Test environment ready
- Test data prepared
- Build deployed and stable
- Requirements frozen
- Unique test case reviewed and approved

Exit Criteria:

- 100% test case execution
- 100% unique test case passed
- No critical or high severity defects open
- All medium severity defects fixed, reviewed and accepted within agreed timeline
- All performance benchmarks fully met
- Security vulnerabilities addressed (critical and high) along with the impact assesment
- Test results fully accepted / approved by competent authorities
- Sign-off from concerned user department/ authorised representatives/stakeholders

7. TEST DELIVERABLES & DOCUMENTATION

7.1. Test Planning Documents

1. Master Test Plan
2. Functional Test Plan
3. Performance Test Plan
4. Security Test Plan
5. Integration Test Plan
6. UAT Support Plan
7. Test Environment Setup Plan
8. Test Data Management Plan

7.2. Test Design Documents

1. Test Case Specifications (unique test case across all testing types)
2. Test Scripts (automated)
3. Test Data Specifications
4. Requirements Traceability Matrix
5. Test Scenario Documents

7.3. Test Execution Documents

1. Daily Test Execution Reports
2. Weekly Test Status Reports
3. Defect Reports and Tracking
4. Test Metrics Dashboard
5. Test Logs
6. Screenshots and Videos (for critical defects)

7.4. Test Closure Documents

1. Test Summary Report (module-wise and overall)
2. Functional Test Sign-off Report
3. Performance Test Sign-off Report
4. Security Test Sign-off Report
5. Defect Analysis Report
6. Test Metrics Summary
7. **Application Readiness Certification** - Final sign-off declaring the application as "ready for production use"

8. QUALITY METRICS & ACCEPTANCE CRITERIA

8.1. Quality Metrics

Test Coverage Metrics:

- Requirements coverage: 100%
- Functional test coverage: 100% of specified requirements
- Integration points coverage: 100%

Defect Metrics:

- Defect removal efficiency: > 99%
- Critical defects in production: 0

Performance Metrics:

- Response time compliance: 99% of transactions within benchmark
- System availability: > 99.5%
- Concurrent user support: 15,000 users (peak load)

Security Metrics:

- Critical vulnerabilities: 0
- High vulnerabilities: 0
- OWASP (**Open Worldwide Application Security Project** testing guideline) Top 10 compliance: 100%

8.2. Acceptance Criteria for Production Readiness**Functional Readiness:**

- All critical and high priority functional unique test case passed
- All modules tested and signed off
- Integration with CFMS successful
- Data migration validated
- Bilingual support (English/Hindi) verified
- GIGW compliance validated
- Mobile application tested and approved
- All user roles and permissions tested

Performance Readiness:

- Stress testing completed successfully
- Endurance testing completed (72 hours)
- Response time benchmarks met
- Database performance optimized
- Batch processing performance acceptable

Security Readiness:

- No critical security vulnerabilities
- No high security vulnerabilities
- Authentication and authorization tested
- Data encryption validated
- Audit logging verified
- Penetration testing completed
- Security audit ready

Operational Readiness:

- User documentation complete
- Training materials prepared
- UAT completed and signed off
- Production deployment plan approved

- Rollback plan documented
- Support processes defined

9. FINAL CERTIFICATION

Upon successful completion of all testing phases and meeting all acceptance criteria, the testing agency shall provide:

APPLICATION READINESS CERTIFICATE

Certifying that:

1. All functional requirements have been tested and validated
2. All modules are functioning as per specifications
3. Integration with CFMS has been successfully tested
4. Performance benchmarks have been met
5. Security testing has been completed with no critical/high vulnerabilities
6. The application is compliant with GIGW guidelines
7. Bilingual support (English/Hindi) has been validated
8. Mobile application has been tested and approved
9. All critical and high severity defects have been resolved
10. User Acceptance Testing has been completed successfully
11. All required documentation has been delivered
12. **The application is READY FOR PRODUCTION USE**

Sign-off Panel:

- Authorised Signatory of Testing agency i.e Project Implementing agency

Annexure 1: Checklist of documents to be enclosed in the Technical Bid

(To be submitted by bidder, on letterhead, duly filled & signed, furnished with technical bid)

Sl. No.	Annexures to be attached	Submitted (Yes/ No)	Page no. of Technical Bid
1	Annexure 2: Bid Covering Letter for Submission of Bid		
2	Annexure-3: Bidder Profile/ Status of the Bidder		
3	Annexure-4: Relevant work experience/projects/credentials with supporting documents		
4	Annexure-5: Prescribed undertakings/ declaration by Bidder		
5	Annexure-6: Annual Turnover & Net Worth Details of bidder		
6	Annexure 7: Format of Bank Guarantee for Earnest Money Deposit (EMD)		
7	Annexure 8: Format for Submission of CV of proposed manpower resource		
8	Annexure-9: Format for Non-Disclosure Agreement (NDA)		
9	Annexure-10: Format of Bank Guarantee for Performance Bank Guarantee		
10	Annexure-11: Format for submission of Commercial Bid / Financial Bid		

Annexure 2: Bid Covering Letter for Submission of Bid

To

The Managing Director,
Bihar State Electronics Development Corporation,
Beltron Bhawan, Shastri Nagar, Patna – 800023 (Bihar)

Sub: RFP for _____ (*INSERT RFP TITLE*) _____

Dear Sir,

With reference to your above cited RFP dated [_____], we have examined the RFP Document and understood their contents, hereby submit my Technical Bid. Capitalized expressions used in this letter have the same meaning as ascribed thereto in the RFP Document

1. We acknowledge that your department will be relying on the information provided in the Technical Bid and the documents accompanying the Technical Bid for selection of the Preferred Bidder and subsequent selection of the Successful Bidder, and we certify that all information provided therein is true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying the Technical Bid are true copies of their respective originals.
2. This statement is made for the express purpose of our participation in the Tender process and our possible selection as Successful Bidder.
3. We hereby confirm that we satisfy all the eligibility conditions prescribed in the aforesaid RFP/Tender Document. Specific confirmations with respect to our compliance with the eligibility conditions may be asked by the Department at any stage with reference to published RFP and its corrigendum/addendum (if any).
4. We hereby acknowledge that if any document submitted or produced by us is discovered subsequently as false, misleading or incorrect then we shall be liable under the Applicable Law in force and additional penal actions as per the decision of department.
5. We shall make available to Department, any additional information/clarification that Department may find necessary or required to supplement, evaluate or to authenticate the Technical Bid contents/claims.
6. We acknowledge the right of Department to reject our Technical Bid without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by Applicable Law, our right to challenge the same on any account, whatsoever.
7. We hereby irrevocably waive any right or remedy which we may have at any stage at law or how so ever otherwise arising to challenge or question any decision taken by the Department in connection with the selection of the Preferred Bidder, or in connection with the Tender process itself, in respect of the RFP Document and the terms and implementation thereof.
8. In the event of, we have been declared as the Successful Bidder, we agree to enter into Agreement and other documents in accordance with the RFP Document and pay such amounts and provide the Performance Bank Guarantee (PBG) as required in the RFP.

9. We have ensured 100% compliance with the RFP Document and to the best of our knowledge this Bid is conforming to all the terms thereof.
10. We understand that Department shall not bear any financial liability, if any project needs to be closed/abandoned due to reasons beyond control of Department.
11. We agree and understand that the Bid is subject to the provisions of the RFP Document. In no case, we shall have any claim or right of whatsoever nature if the work is not awarded to us or our Bid is not opened or rejected.
12. The Financial Bid has been quoted by us after taking into consideration all the terms and conditions stated in the Tender Document, our own estimates of costs and feasibility and after a careful assessment of the geological and other information and all the conditions that may affect the work.
13. Our financial bid and commercial offer is valid for 180 days from the last Date of bid submission as specified in the Tender Document or such extended duration as may be agreed with Department.

In witness thereof, we submit this Bid letter forming part of our Technical Bid under and in accordance with the terms of the Tender Document.

Yours faithfully,

(Signature, Name and designation of Authorized Signatory)

Name and seal of Bidder

Date:

Place:

Enclosed:

[List and description of documents enclosed]

Annexure-3: Bidder Profile/ Status of the Bidder

Name of the Bidder (Bidding entity)	
Legal status of the Bidding entity [e.g., <i>Private Ltd./ Partnership firm/Limited Liability Partnership/Society etc.</i>]	
Address of Registered Office	
Address for correspondence	
Telephone No. Fax No.	
E-mail Address	
Number of years in operation as on bid submission date	
Detail of the person holding power of attorney <i>(Attested & notarised copy of power of attorney on stamp paper to be enclosed)</i>	
PAN of Bidder (copy to be enclosed)	
GST Registration Certificate & GST No. <i>(Copy to be enclosed)</i>	
Copy of EPF, ESI and Labour License etc.	
Any other valid documents/information to prove eligibility and experience	

[Full Signature]

Authorized Signatory

Name and seal of Bidder

Address of the Firm/Agency

Annexure-4: Relevant work experience/projects/credentials with supporting documents

Sl. No.	Details of Assignment	Details (mention Page No. of Bid Proposal)
1.	Name of the Client Organisation	
2.	Name of the Client's Contact person/ designation, Phone, E-mail & address	
3.	Project/Assignment Name	
4.	Scope of the work of project/assignment	
5.	Project/Assignment Start Date:	
6.	Project/Assignment End Date: (mention ongoing with planned end date)	
7.	Total Project Cost (INR), including tax:	
8.	Enclosed following required documents as per Pre-Qualification (PQ) and Technical Qualification (TQ) criteria of RFP: • For completed orders, attach a Copy of Work Order / Contract/LoI along with work completion certificate (with clear details around scope of work and value of the project). • For ongoing orders, attach a Copy of Work Order / Contract/ LoI along with CA certificate showing total revenue earned from the project, as on bid submission date.	

Note: We are also attaching with this filled in annexure, all the required supporting document for establishing the eligibility and technical evaluation criteria of this RFP.

Date:

Place:

Authorized Signatory Name:

Signature

Bidder Seal/Stamp

Name & Address of the Bidder:

Annexure-5: Prescribed undertakings/ declaration by Bidder

UNDERTAKING/DECLARATION

(On letter head of the Bidder)

Date:

To

The Managing Director,
Bihar State Electronics Development Corporation,
Beltron Bhawan, Shastri Nagar, Patna – 800023 (Bihar)

Subject: Declaration required as per your RFP No. _____
dated _____

Dear Sir,

I/we hereby solemnly declare that any of our Directors or Partners, jointly or severally and/or individually or our firm/company have not been black-listed by the Central Govt. or any State Govt. or its public sector undertakings. We do not have any order/declaration of insolvency, judgment, or order of punishment/sentence by any court of law or any judicial/quasi-judicial body.

We further declare that:

- a. We have examined and understood the Act, all rules framed thereunder, the Tender Document and all documents referred therein;
- b. We have examined and have no reservations to the Tender Document, including any amendment/s issued by the Department vide corrigendum/addendums from time to time.
- c. We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice, or restrictive practice, as defined in the Tender Document, in respect of any tender or request for proposal issued by or any agreement entered with the State Government or any other public sector enterprise or any government, central or state; and
- d. We hereby certify that we have taken steps to ensure that no person directly or on our behalf has been engaged or will be engaged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice, or restrictive practice.
- e. We have reviewed the terms of the Tender Document and hereby unconditionally and irrevocably accept, agree and acknowledge the terms thereof.

Yours Faithfully,

Name, Signature and Stamp of the Bidder's authorised bid signatory

Name and Address of the Firm:

Annexure-6: Annual Turnover & Net Worth Details of Bidder

(On the Letterhead of Bidder's CA or Statutory Auditors with verifiable UDIN)

ANNUAL TURNOVER & NETWORTH DETAIL

This is to certify that we M/s _____[AUDITOR FIRM NAME]_____ are the statutory Auditors of M/s _____[BIDDER NAME]_____ and that the below mentioned calculations are true as per the Audited Financial Statements of M/s _____[BIDDER NAME]_____ for the below mentioned years.

We further certify that we have checked and verified the turnover of _____[BIDDER NAME]_____ obtained from **Software Testing, Security Audit and Software Quality Assurance related projects** and accordingly, mentioning the same as follows, alongside the overall turnover for respective financial years:

S. No.	Financial Year	Net Worth (INR Crores)	Overall Annual Turnover (INR Crores)
1	Financial Year 2022-23		
2	Financial Year 2023-24		
3	Financial Year 2024-25		

Annual Turnover from Software Testing, Security Audit and Software Quality Assurance related projects		
S. No.	Financial Year	Annual Turnover from Software Testing, Security Audit and Software Quality Assurance related projects (INR Crores)
1	Financial Year 2022-23	
2	Financial Year 2023-24	
3	Financial Year 2024-25	

Note: The audited Financial Statements for the corresponding year are being enclosed.
Company Secretary / Statutory Auditor /Chartered Accountant

Name of Signatory:

Name of Firm: _____

Address: _____

License no.: _____

Location: _____

UDIN: _____

Date: _____

Annexure 7: Format of Bank Guarantee for Earnest Money Deposit (EMD)
(on stamp paper)

Beneficiary: BIHAR STATE ELECTRONICS DEVELOPMENT CORPORATION

Date:

Bank Guarantee No.:

Bank Guarantee Amount.:

Bank Guarantee Expiry Date.:

Whereas M/s..... (Insert the name of the Bidder) (hereinafter called the “Bidder”) has submitted its technical & financial proposals for the tender of (Insert the name of work for which proposal is submitted) (hereinafter called the “Proposal”) dated against the Authority’s Notice Inviting Tenders (NIT) Notice Inviting Proposal/Invitation for Bid No. (Insert NIT/NIP/IFB number as per publication in newspaper or website).

Furthermore, we understand that, according to your conditions, proposals must be supported by a Bid Security.

At the request of the Bidder, we (insert name of the bank) hereby irrevocably undertake to pay you any sum or sums not exceeding in total amount of (insert bid security amount in figures) (amount in words) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the RFP conditions, because the Bidder:

- a) has withdrawn its Proposal during the period of Proposal validity specified by the Bidder in the Technical Proposal Form; or
- b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter “the ITB”) of the RFP Document; or
- c) having been notified of the acceptance of its Proposal by the Authority during the period of proposal validity, (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the Performance Security, in accordance with the RFP terms.

This guarantee will expire: (a) if the Bidder is the Successful Bidder, upon our receipt of copies of the Contract Agreement signed by the Bidder and the performance security issued upon the Instruction of the Bidder; and (b) if the Bidder is not the Successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the Successful Bidder; or (ii) forty-five days after the expiration of the Bidder’s proposal.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

..... **Bank’s seal and authorized officials’ signature(s)**.....

Annexure 8: Format CV of Proposed Manpower Resources to be deployed

Name of resource				
Proposed Designation				
Date of birth				
Education Qualification Details	PG Degree/PG Diploma name _____ from _____ Specialisation _____ Final score_____ year _____ UG Degree name _____ from _____ Specialisation _____ Final score_____ year _____ Intermediate(12th Std.) from _<board>_ Specialisation _____ Final score_____ year _____ Highschool(10th Std.) from _<board>_ Specialisation _____ Final score_____ year _____			
Employment Record	Organisation Name	Position Held	From Date	To Date
Work Undertaken that Best Illustrates Capability to Handle the Tasks under this RFP : 1. 2. 3. 4. 5. Professional Memberships and/or Certifications:				
S. no.	Certificate Name	Issued by	Certificate No.	Valid upto

Project-1:

Duration (*From Month/Year to Month/Year*):

Location:

Client name:

Employer name:

Positions held:

Main responsibilities/tasks handled:

Project-2:

Duration (*From Month/Year to Month/Year*):

Location:

Client name:

Employer name:

Positions held:

Main responsibilities/tasks handled:

Project-3:

Duration (*From Month/Year to Month/Year*):

Location:

Client name:

Employer name:

Positions held:

Main responsibilities/tasks handled:

Project-4:

Duration (*From Month/Year to Month/Year*):

Location:

Client name:

Employer name:

Positions held:

Main responsibilities/tasks handled:

Candidate Self-Certification

I, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, certifications and my work experience. I understand that any wilful misstatement described herein may lead to my disqualification and legal actions on me.

Date:

Signature:

Annexure-9: Non-Disclosure Agreement (NDA)

(NON-DISCLOSURE AGREEMENT)

Ref. No. _____

Dated: _____

NON-DISCLOSURE AGREEMENT

This agreement is valid till a period of _____ years from the date of work order, and is made by and between **Bihar State Electronics Development Corporation, Bihar, Patna**, (herein referred to as 'DISCLOSING PARTY') whose address is '**Beltron Bhawan, Shastri Nagar, Patna – 800023 (Bihar)**', India and M/s. (hereinafter referred to as Recipient)

Both the parties shall mean and include their successors at Office from time to time, legal representatives, administrators, executors and assigns, etc.

This agreement shall govern the conditions of disclosure by disclosing party to Recipient of certain confidential and proprietary information that is oral, written, or in computer file format. Examples of Confidential Information include the details of beneficiaries, identities of office documents, records and other information retained/ used by disclosing party, in connection with disclosing party's office, employees, official information, computer databases, creatives, content, digital records, digital account details and credentials, containing employee/citizen, files data and System information, designs, drawings, specifications, techniques, models, documentation, diagrams, flow charts, research and development process and procedures, know-how", new product or new technology/policy information, financial, policy, file information and decisions, project/program/ scheme details, budget, governance techniques and materials, timetables, strategies and development plans, trade names and trademarks not yet disclosed to the public, business methods and trade secrets, and personnel information.

1. Purpose of Disclosure: Disclosing party is disclosing the Confidential Information to Recipient in order for Recipient to provide goods and services to disclosing party's in accordance with RFP [INSERT RFP TITLE].

2. Confidentiality Obligations of Recipient. Recipient hereby agrees:

(a) Recipient will hold the Confidential Information in complete confidence and not to disclose the Confidential Information to any other person or entity, or otherwise transfer, publish, reveal, or permit access to the Confidential Information without the express prior written consent of Disclosing Party.

(b) Recipient will not copy, photograph, modify, disassemble, reverse engineer, decompile, or in any other manner reproduce the Confidential Information without the express prior written consent of disclosing party.

If any Confidential Information is delivered to Recipient in physical form, such as data files or hard copies, recipient will return the Confidential Information, together with any copies thereof, promptly after the purpose for which they were furnished has been accomplished, or upon the request of disclosing party. In addition, upon request off disclosing party in writing/email Recipient will destroy materials prepared by Recipient that contain Confidential Information.

(c) Recipient shall use Confidential Information only for the purpose of evaluating Recipient's interest in providing services to disclosing party, and for no other purpose. Without limiting the generality of the previous sentence, Recipient specifically agrees not to sell, rent, or otherwise disclose any of disclosing party's Confidential Information either in full or part to any competitor of disclosing party, nor will Recipient use the Confidential Information to directly or indirectly contact or contract with any of disclosing party's employees, System, contractors and agents who carry out or otherwise fulfill the services on behalf of disclosing party (its "Affiliates"). Recipient shall promptly notify disclosing party of any disclosure or use of Confidential Information in violation of this Agreement for which disclosing party shall be indemnified by the Recipient.

Exclusions: None of the following shall be considered to be "Confidential Information"-

- (a) Information which was in the lawful and unrestricted possession of Recipient prior to its disclosure by disclosing party;
- (b) Information which is readily ascertainable from sources of information freely/easily available in the general public;
- (c) Information which is obtained by Recipient from a third party who did not derive such information from disclosing party.

4. Remedies: Recipient acknowledges that disclosing party's Confidential information has been developed or obtained by the investment of significant time, effort and expense and provides disclosing party with a significant competitive advantage in its business, and that if Recipient breaches its obligations hereunder, disclosing party will suffer immediate, irreparable harm for which monetary damages will provide inadequate compensation. Accordingly, the disclosing party will be entitled, in addition to any other remedies available at law in equity, to injunctive relief to specifically enforce the terms of this Agreement. Recipient agrees to indemnify disclosing party against any losses sustained by disclosing party, including reasonable attorney's fees, by reason of the breach of any provision of this Agreement by Recipient. The Recipient acknowledges that, during the course of execution of this Agreement, it may receive information relating to the Department's internal processes, officials, vendors, service providers, systems, and other stakeholders engaged by the Disclosing Party for discharge of its official functions.

The Recipient hereby agrees that it shall not, directly or indirectly, without the prior written consent of the Disclosing Party, solicit, engage, contract with, or attempt to establish any independent commercial, contractual, or service relationship with any Department, office, agency, vendor, service provider, or personnel whose details are disclosed or become known to the Recipient solely as a result of this Agreement.

In the event the Recipient is found to have violated the above obligation, such action shall be deemed a material breach of this Agreement, and the Disclosing Party shall be entitled to take appropriate legal and contractual remedies as permissible under applicable laws, including termination of the contract, recovery of losses, and such other reliefs as may be available in law or equity.

This clause shall not apply where the Recipient can demonstrate, to the satisfaction of the Disclosing Party, that such relationship existed independently and prior to the disclosure of information under this Agreement.

5. No Rights Granted to Recipient: Recipient further acknowledges and agrees that the furnishing of Confidential Information to Recipient by disclosing party shall not constitute any grant or license to Recipient under any legal rights now or hereinafter held by disclosing party.

6. Miscellaneous Provisions:

- (a) This Agreement sets forth the entire understanding and Agreement between the parties with respect to the subject matter hereof and supersedes all other oral or written representations and understanding. This Agreement may only be amended or modified by a writing signed by both parties.
- (b) If any provision of the Agreement is held to be illegal, invalid or unenforceable, the legality, validity and enforceability of the remaining provisions will not be affected or impaired.
- (c) This Agreement is binding upon the successors, assigns and legal representatives the parties hereto, and is intended to protect Confidential Information of any successors or assign of disclosing party.
- (d) Each Provision of this Agreement is intended to be valid and enforceable to the fullest extent permitted by law. If any provision of this Agreement is determined by any court of competent jurisdiction or arbitrator to be invalid, illegal, or enforceable to any extent, that provision shall, if possible, be construed as though more narrowly drawn, if a narrower construction would avoid such invalidity, illegality, or unenforceability, be served, and the remaining provisions of this Agreement shall remain in effect/force.

(e) The terms and conditions governing the provision of the agreement shall be governed by and construed in accordance with laws of the union of India and shall be subject to the exclusive Jurisdiction of the courts of Patna.

i. Any or all disputes arising out or in connection with this agreement shall so far as may be possible be settled amicably between the parties within a period of thirty days from such dispute(s) arising.

ii. However failing such amicable settlement all disputes and differences, the parties shall be referred to a panel of three arbitrators, for conducting Arbitration in accordance with the provisions of applicable Act at the time of arbitration.

iii. The parties shall mutually ensure and co-operate with each other in the arbitral proceedings, so that the same can be concluded and awarded within a period of six months from the date of commencement of the arbitral proceedings.

iv. The arbitral proceedings shall be conducted in English, both parties shall be bound by the award passed and delivered by the arbitral tribunal and shall not attempt to challenge the authenticity of the award, before any authority or courts or any other statutory body.

v. The venue of arbitration shall be Patna.

(f) If any litigation is brought by either party regarding the interpretation or enforcement of this Agreement, the prevailing party will recover from the other all costs, attorney's fees and other expenses incurred by the prevailing party from the other party.

Signed on behalf of Signed on behalf of

B.S.E.D.C.,

Signature:

Name:

Designation with seal:

Date:

M/s.

Signature:

Name:

Designation with seal:

Date

Annexure-10: Format of Bank Guarantee for Performance Bank Guarantee

Ref: _____ **Bank Guarantee:** _____ **Date:** _____

To

The Managing Director,
Bihar State Electronics Development Corporation,
Beltron Bhawan, Shastri Nagar, Patna – 800023 (Bihar)

Dear Sir/Madam,

In consideration of Bihar State Electronics Development Corporation, (hereinafter referred as the “Beltron” or “Department” or “Buyer” which expressions shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns), pursuant to the RFP for _____ **[INSERT RFP TITLE]**_____ (hereinafter referred to as “RFP”) desires to award a contract to M/s. _____ **[INSERT BIDDER NAME]**_____ (hereinafter referred to as the “vendor” which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), and the Buyer has issued a letter of intent/ letter of intimation (hereinafter referred to as “LoI”) bearing No. _____ **[INSERT LOI NO. & DATE]**_____ and dated _____ and the same having been unequivocally accepted by the vendor, is going to be resulting in a Contract valued at _____ **[INSERT CONTRACT VALUE IN RUPEES]**_____ for a period of _____ **[INSERT CONTRACT PERIOD]**_____ (hereinafter called the “Contract”) and the vendor having agreed to furnish a Performance Bank Guarantee amounting to Rs. _____ **[INSERT BANK GUARANTEE AMOUNT]**_____ (in words and figures) to the Buyer, as a performance security as stipulated by the Buyer in the said RFP, for accuracy of the services performed.

We _____ (Name of the Bank) having its Head Office at _____ (hereinafter referred to as the Bank), which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators executors and assigns) do hereby guarantee and undertake to pay the Buyer immediately on demand any or, all amount payable by the vendor to the extent of _____ **[INSERT BANK GUARANTEE AMOUNT]**_____ as aforesaid at any time up to _____ **[DD/MM/YYYY]**_____ @ _____ **[HH:MM]**_____ without any demur, reservation, contest, recourse or protest and/or without any reference to the vendor. Any such demand made by the Buyer on the Bank shall be conclusive and binding notwithstanding any difference between the Buyer and the vendor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrevocable and shall continue to be enforceable till the Buyer discharges this guarantee.

The Buyer shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee, from time to time to vary it or to extend the time for performance of the contract by the vendor. The Buyer shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Buyer and to exercise the same at any time in any manner, and either to enforce or to forebear to enforce any covenants, contained or implied, in the Contract between the Buyer and the vendor any other course or remedy or security available to the Buyer. The bank shall not be relieved of its obligations under these presents by any exercise by the Buyer of its liberty with reference to the matters aforesaid or any of them or by reason of

any other act or forbearance or other acts of omission or commission on the part of the Buyer or any other indulgence shown by the Buyer or by any other matter or thing whatsoever which under law would but for this provision have the effect of relieving the Bank.

And that, this guarantee shall be extended from time to time for such period (not exceeding two years and three months), as may be desired by M/s. _____ on whose behalf this guarantee has been given Dated this _____ day of _____ 2026 at _____

Bank Guarantee Expiry Date:_____

Bank Guarantee Claim Expiry Date:_____

Signature of Bank Authorised Signatory:_____

Seal of Bank & Authorised Signatory:_____

WITNESS _____

(Name)

(Signature)

(Name)

(Signature)

Note:

- Strike out whichever is not applicable.
- PBG must be valid for sufficient duration as per terms & conditions of RFP.

Annexure-11: Format for submission of Commercial Bid / Financial Bid

(NOT TO BE INCLUDED IN TECHNICAL BID. ONLY TO BE SUBMITTED WITH FINANCIAL BID)

To,

Managing Director

Bihar State Electronics Development Corporation Limited (BELTRON)

Beltron Bhawan, Shastri Nagar, Patna – 800023 (Bihar)

Sub: Financial Bid for Selection of Agency for Software Testing of HRMS Application, Bihar.

Dear Sir,

We hereby submit our Financial Proposal inclusive of all manpower, testing tools, software licenses, travel expenses, security testing, performance testing, project management, reporting, documentation and all other costs required for successful completion of the project as per the RFP requirements.

Commercial Bid Format

Sl. No.	Resource Category	Qty	Man-Months	Rate/Man-Month (₹)	Total Cost (₹)
1	Test Lead cum Project Manager (Technical)	1	6		
2	Domain Business Analyst	1	6		
3	Senior Test Engineer	1	6		
4	Senior QA Engineer	1	6		
5	Junior Test Engineer (3 Nos.)	3	18		
6	Automation Engineer	1	6		
7	Performance Test Engineer	1	3		
8	DBA Specialist	1	2		
9	VAPT Lead	1	3		
10	Application Security Analyst	1	3		
11	Mobile Security Specialist	1	1		
	Total Resource Cost	13	60 MM		

Non-Manpower Components

Particulars	Amount (₹)
Testing Tools, Licenses, Test Management & Defect Tracking Tools	
Sub Total (Project Cost)	

Financial Summary

Particulars	Amount (₹)
Total Resource Cost (60 Man-Months)	
Testing Tools, Licenses, Test Management & Defect Tracking Tools	
Sub Total (Excluding GST & BSEDC Charges)	
GST @18%	
BSEDC Service/Margin Charges @7%	
Grand Total Project Cost	

Important Note

The bidder shall deploy the following resources on a full-time onsite basis at Patna throughout the project period:

1. Test Lead cum Project Manager (Technical)
2. Domain Business Analyst
3. Senior Test Engineer
4. One Junior Test Engineer

Remaining resources may be deployed in hybrid, remote, on-demand or phase-based mode. However, the bidder shall ensure availability of all required experts during the applicable testing phases and whenever directed by BSEDC. The quoted amount shall include all manpower, tools, licenses, travel, performance testing, security testing, VAPT activities, reporting, documentation and certification costs.

Signed on behalf of

M/s.

Signature:

Name:

Designation with seal:

Date