

# **CUSTOMISATION,IMPLEMENTATION,HOSTING AND MAINTENANCE OF "SAUDAMINI" APPLICATION AT KERALA STATE ELECTRICITY REGULATORY COMMISSION (KSERC)**

## **1. Executive Summary & Purpose**

The Kerala State Electricity Regulatory Commission (KSERC/the Commission) was constituted under sub-section (1) of Section 17 of the Electricity Regulatory Commissions Act, 1998, and presently operates under the purview of the Electricity Act, 2003 (EA 2003). The Commission discharges statutory regulatory functions under Section 86 of the EA 2003, including tariff determination, licensing, regulating electricity purchase and adjudicating petitions.

SAUDAMINI (System for Adjudication Using Digital Access & Management of Information through Network Integration) is a proven, Java-based petition e-Filing platform originally developed by the Central Electricity Regulatory Commission (CERC) and successfully operationalized at the Maharashtra Electricity Regulatory Commission (MERC), designed to enable secure, paperless electronic filing and management of regulatory petitions, applications, and related proceedings. To move towards a modern web-based petition e-Filing regime, KSERC invites this Expression of Interest (EOI) through the Kerala Startup Mission (KSUM) to engage a qualified technology startup as the Implementing Agency. The selected entity has to customize, configure, test, implement, host, and maintain the "SAUDAMINI" petition e-Filing software to meet KSERC's specific statutory, procedural requirements.

## **2. Background of the "SAUDAMINI" Application**

- **Origin & Core Architecture:** Developed by the Central Electricity Regulatory Commission (CERC) using Java & JBoss/JSP with a PostgreSQL (RDBMS) backend.
- **Source Code Transfer:** Under an inter-Commission arrangement, CERC shared the software with the Maharashtra Electricity Regulatory Commission (MERC) for implementing in the MERC, which customized and implemented it. MERC subsequently shared the SAUDAMINI source code, DPR, SRS, and technical documentation with KSERC under a formal Memorandum of Understanding. KSERC holds the source code as of date.
- **Core Objective:** Generating companies, licensees, advocates, and other stakeholders to electronically file petitions, applications, replies, rejoinders, and supporting documents through structured templates with secure sign-in.

### **3. Broad Scope of Work for the Startup**

The appointed Implementing Agency shall execute the project end-to-end as per the following broad scope defined in the RFP. Following project sign-off, comprehensive Annual Maintenance Contract (AMC) services shall be required under a separate scope of work and commercial agreement.:

#### **A. Application Customization & Implementation**

1. Business Process Study & SRS: Conduct a detailed requirement study with KSERC and submit a comprehensive System Requirement Specification (SRS) for approval.
2. Module Customizations, including:
  - Branding & UI Customization: Customize page layouts, application headers, official nomenclature, logos, and commission insignia across all portal views and generated receipts/notices.
  - User Registration: Rationalize user categories into Generating companies, Licensees, Organization, Advocate, Any Person / Individual, and Employee. Integrate mandatory OTP verification (SMS/e-mail), capture GSTIN, and adjust attachment requirements.
  - Petition Tab: Configure multi-petitioner/multi-respondent entries, incorporate KSERC (Conduct of Business) Regulations, 2003 map relevant sections of EA 2003 / KSERC Regulations.
  - Checklist Scrutiny: Customize checklist verification in alignment with the KSERC (Conduct of Business) Regulations.
  - MIS Dashboard & Analytics: Role-based dashboards providing real-time statistics on petition pendency, disposal rates, category-wise filings, and revenue from fees/refunds, with exportable reports (PDF/Excel).
  - Deficiencies & Pleadings: Configure deficiency intimation letters and handle Pleadings, Replies, Rejoinders, Responses, and Comments.
  - Digital Signature Certificate (DSC) / e-Sign Integration: Support for DSC-based or Aadhaar-based e-Sign authentication for order signing, petition submission, and official communications, in line with the IT Act, 2000.
  - New Feature Development: Implement an automated fee calculation feature and a post-registration file movement tracking, notifications, hearing intimations.
3. Integrations & Document Linkage: Integrate the application with SMS Gateways and Email Gateways.
4. Testing & Quality Assurance: Perform Unit, Integration, Stress/Load, and User Acceptance Testing (UAT).
5. Source Code & IPR Ownership: Complete ownership of the entire source code, documentation, and all associated customizations/configurations rests solely with KSERC
6. Exit Management & Knowledge Transfer: A documented exit/transition plan at the end of the O&M period, including source code, documentation, and knowledge transfer to KSERC or its successor agency, ensuring no vendor lock-in.

## B. Security Audits & Compliance

- Conduct a pre-Go-Live comprehensive Security Audit (VAPT, source code review, Open Worldwide Application Security Project (OWASP) Top-10) via a CERT-In empanelled auditing agency.
- Carry out half-yearly (every 6 months) recurring security audits throughout the entire 1-year O&M period at the agency's own cost.
- Ensure strict compliance with the Digital Personal Data Protection (DPDP) Act, 2023, and Guidelines for Indian Government Websites (GIGW) web-accessibility standards.
- Maintain a comprehensive audit-trail / activity-logging module capturing all user actions, approvals, and document modifications for statutory and forensic traceability.

## C. Operations, Maintenance & Help Desk

- Provide continuous application support, bug fixing, version control, and backup administration for 1 Years post Go-Live.
- Establish a dedicated Help Desk service reachable via phone and e-mail, governed by defined Service Level Agreements (SLAs) for issue acknowledgement and resolution for a period of 1 year.
- Conduct structured training and capacity-building sessions, along with user manuals and video walkthroughs, for KSERC officials, advocates, and other stakeholders.
- Grievance Redressal Module: An in-application ticketing/grievance mechanism allowing users to raise and track technical or procedural grievances related to e-Filing.

## D. Hosting and Infrastructure

The application shall be deployed and hosted in the Kerala State Data Centre (SDC). The Implementing Agency shall be responsible for configuring, customizing, and modifying the software, database, and system architecture to ensure full compliance with the technical specifications, security protocols, and operational guidelines mandated by the Kerala SDC.

## 4. Recommended Eligibility Criteria for KSUM Startups

To ensure high-quality delivery, KSERC proposes that KSUM filter and nominate startups meeting the following pre-qualification standards:

### Mandatory Criteria

- **Legal Entity:** Must be a Kerala Startup Mission (KSUM) recognized entity with minimum 2 years of existence.
- **Technical Capability:** Proven experience in web application development and customization using Java, JSP, Struts/Spring, Hibernate, and PostgreSQL.
- **Security Standards:** Capability to strictly comply with CERT-In directives, OWASP Top-10 vulnerabilities, GIGW guidelines, and DPDP Act 2023.

- **Local Presence:** Registered office/branch in Kerala preferably in Trivandrum, or submission of a formal undertaking to establish a local Project Management Cell for the engagement in Thiruvanthapuram.
- **Team Strength:** Professionals with hands on experience in Developing/ customizing software using Java, JSP, Struts, Hibernate, Spring, POSTGRESQL, open-source Document Management System (DMS) applications etc.

#### **Desirable Criteria**

- **Domain Experience:** Prior track record in developing and maintaining web portals or software solutions for Central/State Government departments or PSUs, with preference for Case-File Management / e-Filing platforms.
- **Cloud & DevOps Capability:** Demonstrated hands-on experience in deploying, configuring, and managing enterprise applications on Government Cloud infrastructure (e.g., Kerala State Data Centre - KSDC).

### **5. Contact Details of Nodal Officer**

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