

Kerala Real Estate Regulatory Authority



**Call for Expression of Interest for the
Development of an AI OCR reader**

Introduction

Kerala Real Estate Regulatory Authority was constituted by the Government of Kerala under the aegis of the Real Estate (Regulation and Development) Act 2016 to usher in greater accountability and deliver value through regulatory compliance, furthering a sense of conduct and public confidence in the real estate sector while also fostering a healthy and competitive sector.

Real Estate (Regulation and Development) Act 2016 is a landmark legislation designed to regulate and promote the real estate sector. Backed by the overarching mandate, K-RERA aims to be an influential advocate of the real estate segment, ensuring accountability, citizen-centric measures, and enhanced financial discipline, safeguarding the interests of the consumer.

The Authority shall strive to facilitate the growth and promotion of a healthy, transparent, efficient, and competitive real estate sector while protecting the interests of allottees, promoters, and real estate agents. The authority also has an adjudicating mechanism for speedy dispute redressal regarding registered real estate projects and an Appellate Tribunal to hear appeals from the decisions, directions, or orders of the Real Estate Regulatory Authority.

1. Background and Current Challenges

K-RERA currently manages a complex regulatory environment with the following operational pain points:

- **Document-Heavy Processes:** Project registration involves approximately 41 documents, leading to time-consuming manual scrutiny and an increased risk of human error.
- **Lack of Real-Time Validation:** Applicants do not receive immediate feedback on errors related to document format, structure, or mandatory fields during upload, leading to repeated submissions and delays.
- **Limited Document Comparison Capabilities:** K-RERA officials currently lack automated tools to compare newly uploaded documents with previously submitted versions, making it difficult to identify changes, omissions, or inconsistencies efficiently.
- **Absence of Actionable Insights on Document Quality:** There is no system-driven mechanism to flag formatting issues, deviations from prescribed templates (such as agreements for sale), or suggest corrective actions, resulting in additional manual review effort.

2. Scope of Work

K-RERA intends to outsource the development of two primary AI-based technology solutions:

AI-Enabled Document Review and OCR System: An intelligent solution to automate the document processing workflow, which is saved and updated through an ASP.NET application with MS SQL DB:

- **Intelligent OCR:** Automated parsing and extraction of data from uploaded documents to reduce manual data entry.

- **Validation & Compliance:** Automated checks for document completeness, logical consistency, and regulatory compliance.
- **Insight Generation:** System-generated alerts for officials to highlight potential compliance issues and provide trend analysis.

3. Technical Requirements

The successful bidder must demonstrate proficiency in the following areas:

- **Web Development:** Expertise in ASP.NET for K-RERA Web portal since documents are uploaded from that portal
- **AI/ML Expertise:** Experience in developing Agentic AI frameworks and high-accuracy OCR systems.
- **Data Integration:** Ability to connect disparate data sources (SQL databases, Google Sheets, etc.) while ensuring data integrity and security.

4. Objectives and Benefits

- **Process Efficiency:** Automate preliminary scrutiny of project registration documents to significantly reduce manual effort and processing time involved in handling large volumes of submissions.
- **Real-Time Validation for Applicants:** Provide immediate, system-generated feedback to applicants on document format, completeness, and compliance at the time of upload, reducing repeat submissions and avoidable delays.
- **Improved Accuracy in Document Scrutiny:** Minimize human error through AI-assisted document reading, OCR-based content extraction, and rule-based validation against prescribed regulatory formats.

- **Automated Document Comparison:** Enable K-RERA officials to automatically compare newly uploaded documents with previously submitted versions to quickly identify changes, deviations, or inconsistencies.
- **Standardization of Submissions:** Ensure documents such as agreements for sale and declarations adhere to approved templates and formats, reducing ambiguity and variation in submissions.
- **Decision Support for Officials:** Provide structured insights and flags highlighting key issues, missing clauses, or non-compliant formats to support faster and more informed decision-making by K-RERA officials.
- **Scalable and Future-Ready System:** Establish a technology framework that can adapt to increasing application volumes, evolving regulations, and additional document types without major rework.

5. The EOI process

Various Government Departments approach Kerala Start-up Mission for the development of mobile and web applications. These requests are met through a facilitation devised by KSUM. Kerala Start-up Mission facilitates the entire process by helping departments to finalize technical specifications, circulating the same among start-ups, conducting an initial technical assessment, and shortlisting for the committee to take the final decision.

The following are the steps involved:

- Call for Expression of Interest among start-ups incubated/registered with KSUM
- Submission of EOI (in the link provided by KSUM)
- KSUM to organize interaction with the Department for clarifying doubts and queries of interested start-ups.

- Technical Proposals are then obtained from start-ups that have submitted their interest.
- Technical proposals are then evaluated.
- Start-ups that qualify the technical evaluation are then asked to submit the financial proposal.
- L1 among the start-ups is identified by the method of Quality and Cost Based Selection (QCBS), wherein 70% marks are given for the technical proposal and 30% for the financial proposal.
- The L1 start-up is then recommended to the Department. Kerala Real Estate Regulatory Authority
- KSUM ensures that the start-up delivers the product to the Department and the Department is satisfied with the work.
- The payment is made directly by the department to the start-up after signing an Agreement.
- The Department is also expected to do the Security auditing of the application developed by the start-up through CERT-K

NOTE: Eligibility for Start-up to participate in the EOI

The start-up has to be registered with Kerala Start-up Mission and Start-up India, and have preferable experience with the Real Estate Vertical.