

# Call for Expression of Interest (EOI)

## Development of a Chatbot for Kerala State Annual Finance Budget (2024-25)

### 1. Introduction

The Government of Kerala intends to develop and deploy a public-facing chatbot for the 2024-25 Annual Finance Budget. Once the official budget presentation is made, citizens, industry stakeholders, media persons, and other interested parties should be able to interact with this chatbot to quickly obtain information on budget provisions, allocations, sanctions, and other financial details relevant to them.

This document serves as a Call for Expression of Interest (EOI) inviting startups to propose solutions that can be rapidly designed, developed, and deployed to meet this requirement.

### 2. Background

- Objective:** The Kerala State Budget is a crucial policy document that outlines the government's expenditure priorities and revenue streams. To foster transparency and public engagement, the Government of Kerala aims to leverage emerging technologies to disseminate information effectively.
- Rationale:** With the increasing emphasis on digital governance and citizen-centric service delivery, a chatbot solution will offer:
  - Immediate, on-demand access to official budget information.
  - Easily understandable responses to user queries on allocations, funds sanctioned, and sector-wise budget provisions.
  - Reduction of manual query handling by government departments.
- Target Audience:**
  - Citizens seeking information about government spending.
  - Business and industry stakeholders requiring clarity on policy changes and budget allocations.
  - Media and research organizations analyzing budgetary allocations.

### 3. Scope of Work

The selected startup will be responsible for:

#### 1. Chatbot Design & Development

- Create an intuitive chatbot interface capable of handling both text-based and potentially voice-based queries (if feasible within the project timeline).
- Use an AI-driven natural language processing (NLP) engine to comprehend user queries.

#### 2. Integration of Budget Data

- Structure and integrate official budget data (text, tables, charts) in a manner that is easy for the chatbot to retrieve and present.
- Ensure data accuracy and real-time updates if additional clarifications or revisions are released post-budget speech.

#### 3. User Experience & Interface

- Develop a user-friendly interface (either as a web-based widget, mobile application add-on, or integrated into existing government portals).
- Provide multilingual support to cater to Kerala's diverse linguistic needs (Malayalam and English at the minimum).

#### 4. Security & Compliance

- Adhere to all relevant data privacy standards and government IT security protocols.
- Implement necessary authentication or access controls if certain in-depth budget details require restricted viewing.

#### 5. Testing & Deployment

- Conduct thorough functional, performance, and security testing.
- Deploy on a hosting environment approved by the Government of Kerala.
- Provide immediate support for any post-deployment issues or bug fixes.

#### 6. Maintenance & Support

- Offer training and handholding to government officials for routine updates and improvements.
- Provide ongoing technical support and enhancements as needed for at least the initial budget cycle (2024-25).

## 4. Technical Requirements

- **NLP Technology:** The chatbot should leverage robust NLP frameworks, preferably open-source or well-known commercial solutions to ensure scalability and future enhancements.
- **Database & Knowledge Base:** Must be able to parse large volumes of structured and unstructured budget data quickly and accurately.
- **API Integration:** Provide or integrate with APIs to pull updated information if the budget data is modified, or if additional clarifications are issued.
- **Multichannel Deployment:** The solution should be embeddable on government websites and potentially integrated with popular messaging platforms.
- **Analytics & Reporting:** Inbuilt analytics to capture user query trends, number of sessions, frequently asked questions, and other performance metrics.

### **The EOI process**

Kerala Startup Mission is approached by various Government Departments for the development of mobile and web applications. These requests are met through a facilitation device by KSUM. Kerala Startup Mission facilitates the entire process by helping departments to finalise technical specifications, circulating the same among startups, initial technical assessment and short listing for the committee to take final decision.

Following are the steps involved:

1. Call for Expression of Interest among startups incubated/registered with KSUM
2. Submission of EOI (in the link provided by KSUM).
3. KSUM to organize interaction with the Department for clarifying doubts and queries of interested startups.
4. Technical Proposals are then obtained from startups who have submitted the interest.
5. Technical proposals are then evaluated.
6. Startups who qualify the technical evaluation are then asked to submit the financial proposal.

7. L1 among the startups is identified by the method of Quality and Cost Based Selection (QCBS) wherein 70% marks for the technical proposal and 30% for the financial proposal.
8. The L1 startup is then recommended to the Department.
9. KSUM ensures that the startup delivers the product to the Department and the Department is satisfied with the work.
10. The payment is made directly by the department to the startup after signing an Agreement.
11. The Department is also expected to do the Security auditing of the application developed by the startup through CERT-K and also to host the application in the State Data Center

**Eligibility for Startup to participate in the EOI**

The startup has to be registered with Kerala Startup Mission and Startup India.