

Terms of Reference (ToR)

Design, Development and Maintenance of a Citizen-Centric Government Super App with Service Modules

1. Introduction and Background

Recognizing the transformative potential of digital technologies in enhancing citizen engagement and streamlining public service delivery, the Government of Sri Lanka, through its Ministry of Digital Economy, is embarking on a significant initiative to develop a comprehensive Super App for citizen-centric government services in line with Sri Lanka's Digital Economy Blueprint. This strategic move aligns with a global trend towards digital transformation and the creation of unified platforms that simplify interactions between citizens and governments.

Currently, Sri Lankan citizens often need to navigate multiple websites, applications, and physical touchpoints to access various government services. This fragmented landscape can lead to inefficiencies, increased complexity for users, and a less than optimal experience.

2. Objective of the Consultancy

The Ministry of Digital Economy, Sri Lanka, invites Expressions of Interest (EOI) from qualified and experienced technology service providers for the design, development, deployment, implement and support of a comprehensive Super App for citizen-centric government services. This initiative aims to provide a unified digital platform for Sri Lankan citizens to access a broad range of government services securely, efficiently, and conveniently.

3. Scope of Work

The selected consultancy firm will be required to undertake the following tasks for the design, development, deployment and maintenance of the central container app including Super App Phase 1 service modules (Digital Driving License, Digital Revenue License, Digital Motor Insurance Certificate and Digital Emission Certificate).

3.1. Requirement Analysis for Super App

Conduct comprehensive requirement analysis for the:

- 3.1.1.** Super App Container App and Super App web portal
- 3.1.2.** Super App Service Modules as mentioned in the section 3
- 3.1.3.** Integration of Sri Lankan Unique Digital ID (SLUDI) in to the Super App as a single sign on/authenticator app
- 3.1.4.** Integration of the e-Wallet (digital wallet) in to the Super App to display Service Modules as a verifiable credentials (VCs)
- 3.1.5.** Super App Checker App module for police and administration officers to validate the authenticity of the digital documents available on the Super App

3.2. Super App Architecture Design

- 3.2.1. Design and develop the central **container app framework** using MVVM (Model-View-ViewModel) architecture ensuring scalability, maintainability, and testability. This should ensure the use of latest technology stack which is also supported by the microservices and event-driven frameworks
- 3.2.2. Develop a comprehensive **online web application portal** using the latest technology stack which supports the MVVM architecture, microservices and event driven frameworks.
- 3.2.3. Build **native mobile applications** for both iOS and Android platforms with cross-platform support.
- 3.2.4. Implement **modular service architecture design** to support future expansion and integration of multiple government services into the Super App.
- 3.2.5. Create a **comprehensive guide (SDK)** with step-by-step instructions on developing, testing and deploying service modules that will be included in the Super App container app as a service to be consumed by the Super App users.

3.3. Core High Level Features Design, Development and Implementation (Web/Mobile)

3.3.1. Profile Management Module:

- Build comprehensive profile management system for personal information and preferences
- Implement user settings for language, notifications, and security configurations
- Develop privacy controls for user privacy settings and data sharing preferences

3.3.2. Home Dashboard Module:

- Create personalized dashboard with customizable service tiles based on user preferences
- Implement quick actions functionality for frequently used services
- Develop real-time status updates for service modules
- Integrate news and announcements system for government updates

3.3.3. Super App Service Modules (Phase 1):

Design, develop, implementation and maintenance of below super app service modules as verifiable credentials (VCs) on the super app Phase 1 release.

- Electronic Driving License with QR code/manual validation/verification
- Electronic Motor Vehicle Revenue License with QR code/manual validation/verification
- Electronic Motor Insurance Certificate with QR code/manual validation/verification
- Electronic Motor Emission Certificate with QR code/manual validation/verification

3.3.4. Super App Checker Module:

- Design, Develop and deployment of Super App checker module for the Police officers and for the Admin officers to scan the QR code or manually enter document id (reference id) number and validate the authenticity of the digital documents of the Super App
- Generate Reports and Analytics required by the Admin officers to make their decisions

3.3.5. **Notification System:**

The implementation of the **Notification System** delivers timely government service updates through multiple channels tailored to urgency and user preference as specified below channels.

Push notifications provide instant mobile alerts for appointments and application updates.

In-app messaging keeps users informed about document expiration dates, renewal reminders, and service status changes.

Email notifications deliver detailed confirmations and important updates that users can reference later.

SMS alerts ensure critical messages like OTP codes and urgent deadlines reach users immediately.

WhatsApp integration offers a convenient, conversational channel for queue updates, document collection notices, and general service reminders. The system intelligently routes each message through the most appropriate channel, ensuring citizens stay connected to their government services without information overload.

3.3.6. **Super App Login Integration:**

- Implement SLUDI (Sri Lanka Unique Digital Identity) integration for seamless authentication
- Implement multi-factor authentication system with OTP via SMS and email
- Integrate biometric authentication supporting fingerprint and face recognition

3.3.7. **API Integration and Services**

- Develop a complete RESTful API suite with comprehensive documentation for all the required Super App interfaces including the Super App service modules.
- Design and implement secure database schema with encryption protocols.
- Create robust backend services to support all frontend functionalities.
- Ensure API scalability and performance optimization for high-volume usage.

3.3.8. **Release Management and DevOps Implementation**

- Establish a comprehensive DevOps/DevSecOps environment implementing Continuous Integration and Continuous Deployment (CI/CD) pipelines.
- Ensure automated, reliable, and traceable software releases across all environments on the Lanka Government Cloud (LGC).
- Implement version control and deployment management systems for efficient release cycles.
- Set up automated testing and quality assurance processes within the CI/CD pipeline.

3.3.9. Testing and Quality Assurance

- Develop comprehensive test cases covering all functionalities of the system.
- Conduct performance testing and optimization testing of the system.
- Conduct Vulnerability Assessment and Penetration Testing (VAPT) by the Sri Lanka National Centre for Cyber Security (CERT) and obtain their clearance prior to go live.
- Prepare detailed testing documentation and reports of the system for all the testing carried out.

3.3.10. Authentication and User Management System

- Develop comprehensive user management portal with admin dashboard capabilities.
- Create secure authentication protocols and session management.
- Implement role-based access control and authorization systems.

3.3.11. Deployment and Production Setup

- Create production-ready deployment scripts and configurations.
- Ensure seamless deployment on Lanka Government Cloud (LGC).
- Deploy mobile app on Play Store/Apps Store
- Implement monitoring and logging systems for the production environment.
- Provide deployment manuals and operational documentation.

4. Expected Deliverables

The consultancy firm is expected to deliver the following:

4.1. Planning and Design

- 4.1.1.** Detailed project plan with timelines
- 4.1.2.** Requirement analysis, Business Requirement and Functional Requirement Documentation reports
- 4.1.3.** Design/Architecture documents
- 4.1.4.** Product backlog

4.2. Web Application

- 4.2.1.** Complete responsive web application/portal developed using the latest technology stack which supported by the MVVM architecture, microservices and event-driven frameworks for building Super App, Service Modules and Checker App functionality.
- 4.2.2.** Web application source code and deployment documentation

4.3. Mobile Applications

- 4.3.1. Native Android Application (APK file) with Super App, Service Modules and Checker App functionality
- 4.3.2. Native iOS Application (IPA file) with Super App, Service Modules and Checker App functionality
- 4.3.3. Source code and development documentation for mobile applications

4.4. Backend Services and APIs

- 4.4.1. Complete RESTful API suite with comprehensive documentation
- 4.4.2. API documentation portal with specifications and testing tools
- 4.4.3. Backend source code with detailed technical documentation

4.5. Database and Security Components

- 4.5.1. Secure database schema design with encryption protocols
- 4.5.2. SQL scripts and database documentation
- 4.5.3. Security framework implementation with monitoring capabilities
- 4.5.4. Security protocols and tools documentation

4.6. Authentication and Integration Modules

- 4.6.1. SLUDI integration module with multi-factor authentication
- 4.6.2. Authentication system source code and configuration files
- 4.6.3. Integration documentation and setup guides

4.7. Administrative and Management Tools

- 4.7.1. User management portal with admin dashboard functionality
- 4.7.2. Web application for system administration and monitoring
- 4.7.3. Administrative user guides and operational manuals

4.8. DevOps and Deployment Infrastructure

- 4.8.1. Complete CI/CD pipeline setup with automation scripts
- 4.8.2. DevOps/DevSecOps environment configuration for release and change management
- 4.8.3. Deployment pipelines and automation scripts
- 4.8.4. Infrastructure setup documentation and operational manuals

4.9. Testing and Quality Assurance Documentation

- 4.9.1.** Complete test cases covering all system functionalities
- 4.9.2.** Performance testing results and optimization reports
- 4.9.3.** Security testing reports and vulnerability assessments
- 4.9.4.** Quality assurance documentation in PDF format

4.10. Deployment Package

- 4.10.1.** Production-ready deployment scripts and configurations
- 4.10.2.** Deployment manuals and step-by-step guides
- 4.10.3.** System configuration files and setup instructions

5. Required Expertise and Experience of the Consultancy Firm

The ideal consultancy firm should possess the following expertise and experience

- 5.1.** Minimum 5 years proven track record which includes minimum 3+ Super Apps or related mobile/web projects, including;
 - 5.1.1.** Annual turnover over 100 million for the last 5 years
 - 5.1.2.** Extensive MVVM architecture implementation
 - 5.1.3.** Cross-platform iOS/Android development
 - 5.1.4.** Proficiency in latest technology stack
 - 5.1.5.** RESTful API development, backend services experience, and secure database design capabilities
- 5.2.** Successfully completed at least one web/mobile project with a value of LKR 25 million withing the last 5 year prior to submitting the EOI.
- 5.3.** Proven experience in developing or multi-service mobile platforms (super apps) using Cross-Platform Technology
- 5.4.** Proven experience in developing and deploying large-scale, citizen-facing mobile and web applications.
- 5.5.** Expertise in microservices, cloud-native architectures, and secure REST API development and integrations.
- 5.6.** Capability to deliver trilingual (Sinhala, Tamil and English), accessible, and inclusive digital solutions.
- 5.7.** Strong project management and agile delivery capabilities.

6. Duration of the Consultancy

The estimated duration of the consultancy is six (06) months. A detailed timeline will be agreed upon during the inception phase.

7. Reporting Requirements

The consultancy firm will report to the Project Management Unit of Ministry of Digital Economy. Regular progress meetings will be held to discuss progress and address any issues.

8. Proposal Submission Requirements

Interested consultancy firms are invited to submit a proposal that includes:

8.1. Company Profile:

- 8.1.1.** Overview
- 8.1.2.** Legal status
- 8.1.3.** Organizational structure

8.2. Relevant experience:

- 8.2.1.** Details of projects
- 8.2.2.** Emphasis on government or large-scale citizen services

8.3. Technical Capability:

- 8.3.1.** Overview of technical skills
- 8.3.2.** Frameworks proposed
- 8.3.3.** Platforms proposed

8.4. Approach and Methodology:

- 8.4.1.** High-level understanding of the project
- 8.4.2.** Delivery approach
- 8.4.3.** Team structure

8.5. Consortium Details (if applicable):

- 8.5.1.** Roles and responsibilities of each partner

8.6. References:

- 8.6.1.** At least two references from previous clients for project work

8.7. Declaration

- 8.7.1.** Statement of interest
- 8.7.2.** Commitment to participate in the subsequent RFP process

8.8. Additional Submissions (Mandatory):

- 8.8.1.** Proposed Technical Architecture including:
 - Technology stack
 - Modularization
 - Security
 - Scalability

- 8.8.2.** Sample UI/UX Proposal:
- Illustrative wireframes or mockups
 - Demonstrating user experience and accessibility
- 8.8.3.** Proposal for External Service Integration:
- Approach to enabling third-party service providers
 - Development of pluggable modules compliant with: - Super App's UI/UX guidelines - Security guidelines
- 8.8.4.** Tentative Project Delivery Timeline:
- High-level phase
 - Estimated duration
- 8.8.5.** Rough Cost Estimation:
(If permissible under procurement guidelines)

8.9. Submission Format

- 8.9.1.** All documents must be submitted in English
- 8.9.2.** Electronic submission via email to: procurement@mode.gov.lk
- 8.9.3.** Maximum file size: 50MB (use cloud sharing links for larger files)
- 8.9.4.** All documents must be in PDF format
- 8.9.5.** Clear file naming convention: "CompanyName_SuperApp-C2_EOI_2025_DocumentName "

9. Evaluation Criteria and Scoring Matrix

Proposals will be evaluated based on the following criteria: The following evaluation criteria is a **guideline only**.

9.1. Scoring System Overview

- 9.1.1. Total Maximum Score:** 100 points
- 9.1.2. Minimum Qualifying Score:** 70 points

Criteria	Maximum Score	Score Bands	Score Breakdown
Comprehensive Mobile & Web Development Track Record	15	Years of experience (>5 years)	5
		Number of Mob/Web Projects (>3 projects)	10
Completed at least one web/mobile project with a value of LKR 25 million	10	Project Value (> 25 million)	6
		Project Value (< 25 million)	4

Technical Experience	70	Experience in Super App Development (no of projects >3)	10
		Experience in microservices, cloud-native architectures, and secure REST API development and integration (no of projects >3)	10
		Experience in Cross Platform App development (no of projects >3)	10
		Citizen Centric App Development Experience (no of projects >3)	10
		Experience in implementation/integration of authentication and validation systems (no of projects>3)	10
		MVVM Architecture Implementation (no of projects >3)	10
		10,000+ users (no of apps at least 3)	10
Trilingual (Sinhala, Tamil and English) & Accessibility Solutions	5	Experience in development with multi-lingual (Sinhala, Tamil and English) applications	3
		Accessibility solution (no of projects >2)	2

9.2. Evidence Requirements

Criteria	Required Documentation
a) Comprehensive Mobile & Web Development Track Record	I. Project Portfolios with Super Apps or similar Citizen Centric Apps II. Mobile Apps, technical architecture documents III. Code samples IV. Client testimonials V. Team CVs
b) High-Value Project Experience	I. Signed contracts II. Project completion certificates III. Financial statements IV. Client references
c) Super App Development	I. App store links II. technical specifications III. user analytics IV. architecture diagrams
d) MVVM Architecture	I. Code samples II. architecture diagrams III. project documentation
e) Large-Scale Applications	I. User analytics reports II. performance metrics

	III. scalability documentation IV. case studies
f) Advanced Architecture	I. System architecture diagrams II. cloud deployment evidence III. API documentation, IV. security certifications
g) Trilingual (Sinhala, Tamil and English) & Accessibility Solutions	I. App screenshots II. accessibility audit reports III. language localization documentation
h) Project Management	I. Project team members with Project management certifications II. agile certification III. agile project documentation

10. Confidentiality

All information shared with the consultancy firm will be treated as confidential.