

REQUEST FOR PROPOSAL (RFP)

Financial consumer protection suite with web portal, AI-chatbot and data analytics

Project: Development of a financial consumer protection suite ("the Project") for a financial authority (the "Agency").

Description: A supotech solution comprising (1) a web portal application for managing the intake, processing, and resolution of claims, (2) an AI chatbot for handling claim submissions and resolving inquiries, and (3) a data analytics tool to generate market conduct risk indicators and alerts

Contracting Entity: University of Cambridge, Judge Business School

Countries and Agencies: Superintendency of Popular and Solidary Economy, Ecuador (SEPS)

Grant Value: USD TBD

Publication Date: 24 July 2024

Submission of Proposal Deadline: 5 August 2024 23:59 GMT Time (UTC +0)

Project Implementation Dates:

- **Phase 1:** September 2024– December 2024
- **Phase 2:** January 2025 – April 2025

Procurement Process Managed by: Cambridge SupTech Lab Launchpad at the Cambridge Centre for Alternative Finance (CCAF), the University of Cambridge Judge Business School

Submission: Submit all documents as detailed in Section III (3 a. Submission requirements) below

Queries: email suptech-launchpad@jbs.cam.ac.uk with any queries.

Language: All submissions must be written in English. All applications and data products must be in Spanish.

I. Project Description

The objective of the project is to create a Financial consumer protection Suptech tool with the following components: **(1)** a Claims Management System (CMS) to enhance the SEPS's ability to analyze, respond to, and manage claims in the Popular and Solidarity Financial Sector efficiently, **(2)** an AI-chatbot to manage queries from partners, customers and other users related to the supervised financial providers (SFPS); this chatbot will also facilitate the registration/assistance to file a claim; and **(3)** a data analytics tool to generate market conduct risk indicators and alerts.

The proposals should provide cost and timelines to develop the requirements listed in "Key Technical Requirements" in 2 phases:

1. **Phase 1:** A proposal, including cost for a live-production-ready prototype citing the items in Table 1, to be developed, integrated, tested and deployed in the SEPS' Test environment as part of a prototyping phase by December 2024.
 - At this phase, vendors are welcome to submit proposals for developing solutions that include some, but not necessarily all, of the specified technical requirements. Vendors may also submit proposals for developing a single component (e.g., an AI chatbot), a combination of components (e.g., a web portal and a data analytics tool), or all three components together (a web portal, an AI-chatbot, and a data analytics tool).
 - The cost for the different components of the solution should be presented separately so the Agency can decide whether to proceed with each component.
 - By default, it should be assumed that the entirety of the solution will be transferred to the Agency's in-house team at the end of the prototyping phase.
 - Proposals should describe how the technology and source code will be transferred to the financial authority during the deployment, in line with the Agency's intention to transition to in-house maintenance and development. They should also detail the strategy for testing, including a pool of hours for stabilization and technical support to address unforeseen requirements, performance issues, and bug fixes. As well as plans for training, knowledge transfer, and documentation.
 - Throughout the course of the project, the Lab will facilitate conversations between the solution provider and Agency (via regular Project Team meetings) to more precisely assess which components will transition to in-house development and when in the product lifecycle this transition is expected. The solution provider is expected to maintain and share up-to-date documentation with the Agency and the Lab reflecting the outcomes of these conversations throughout the project.
2. **Phase 2:** A proposal including cost and timeline for continued development and operational support beyond the prototype phase until deploying a full live solution that includes the remaining items in Table 1 that cannot be accomplished by December 2024.
 - The timeline should not exceed April 1, 2025 (TBD no longer than 6 months).

- The Agency may opt to engage with the vendor for continued development, enhancements, and/or operational support.
- The cost for the different components of the solution (web portal, AI-chatbot, and data analytics) should be presented separately so the Agency can decide whether to proceed with each component.
- Proposals should describe how the technology and source code will be transferred to the financial authority during deployment, aligning with the Agency's intention to transition to in-house maintenance and development. They should also detail the strategy for testing, including a pool of hours for stabilization and technical support to address unforeseen requirements, performance issues, and bug fixes, along with plans for training, knowledge transfer, and documentation.

Basic Requirements

The suptech solution, comprised of the CMS, AI-chatbot and data analytics tool, will enable the Agency to:

- Enhance the intake, processing, monitoring, and resolution of claims and complaints within the Popular and Solidarity Financial Sector.
- Standardize the processes for resolving claims and complaints in Popular and Solidarity Financial Sector.
- Facilitate claim and complaint submissions and address inquiries using AI to improve access to SEPS' services.
- Standardize SEPS' responses and guidance for inquiries, including integrating financial education messages into inquiries.
- Utilize data analytics to generate operational indicators and alerts to be used for market conduct supervision, thereby enhancing consumer protection supervision outcomes.
- Monitor claims and complaints in real time.
- Reduce operational load.
- Automatically incorporate financial education messages in queries.

Will enable the consumer to:

- Access a user-friendly web platform for submitting claims, linked to a convenient AI-chatbot for both claim submissions and inquiries.
- Efficiently communicate with financial institutions and SEPS (web platform and AI-chatbot)
- To provide necessary information (text or documents) throughout the process (web platform and AI-chatbot).
- Track the status of their claims and complaints in real-time (web platform and AI chatbot).
- Ensure that claims/complaints are handled in strict accordance with the existing regulatory framework (web platform).

- Receive more precise, standardized, and timely responses to inquiries, claims, and complaints (web platform and AI-chatbot).
- Gain access to financial education advice and tips (AI-chatbot).
- Boost confidence in the Popular and Solidarity Financial Sector.

Will enable financial institutions (FIs) to:

- Utilize the web portal for registering and processing claims and complaints, thereby enhancing claims and complaints management processes.
- Interact with users through the web portal to request additional information.
- Receive statistics, management indicators, and alerts in accordance with SLAs.
- Submit inquiries to SEPS regarding regulatory or procedural aspects and information structures through the chatbot.
- Improve the claims attention process.
- To have an automated guide (chatbot) to handle problems in the reporting of information structures requested by the SEPS.

High-level requirements

The main deliverable for this collaboration will be a supotech suite with the following core components:

Claims Management System (CMS)

A single point of attention for claims in the popular and solidarity financial sector, where registration and monitoring of claims will be conducted. The web portal to be developed should be deployed in the SEPS data center, for which the following guidelines must be considered:

AI-Chatbot:

Provide users with guided assistance with inquiries raised by any type of user and related to any aspect within the scope of SEPS supervision. For the deployment of the AI chatbot, the vendor must detail the process for transitioning the solution to live production-ready.

Data analytics

Evaluating the risk of market conduct using transactional analysis of structured data from complaints, claims and inquiries. Advanced processing such as text analysis to include unstructured data into the supervisory insights. For the development of reports, dashboards, and information cubes, the following tools may be used, but are not limited to: (1) IBM DataStage - etl (2) IBM Netezza - warehouse (3) Microsoft analysis services - information cubes (4) PowerBI - bi reports (5) jasper - transactional reports.

Production roadmap

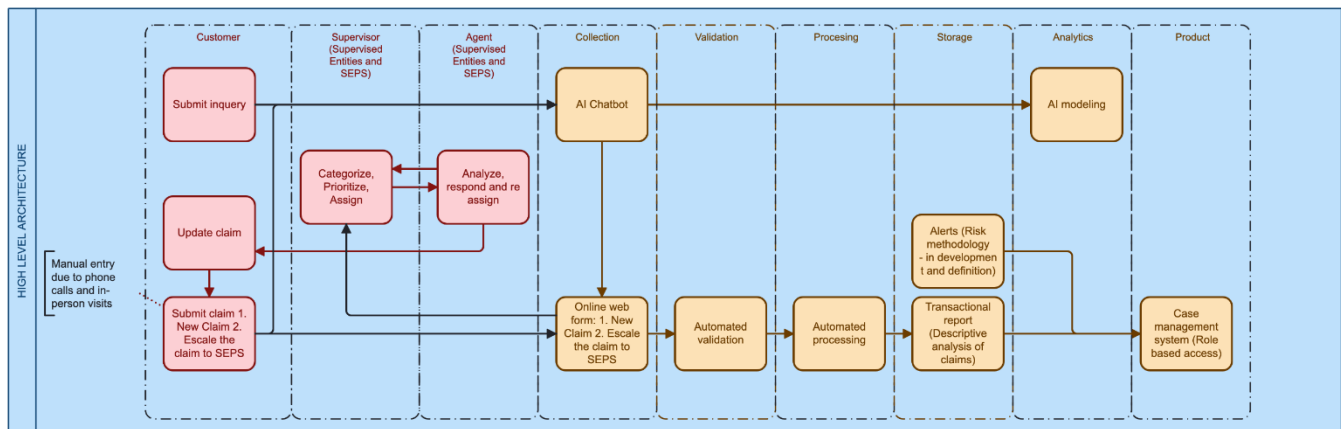
The deployment process includes testing and certifying the software in a pre-production environment before deploying it to production. The vendor should capture and document a production roadmap to plan the go-live phase requirements.

Key lessons documented and disseminated

One of the high-level requirements for the project is the systematic documentation and dissemination of key lessons learned throughout the project lifecycle. This process involves capturing insights, challenges, and successes encountered during the development and implementation phases. These documented lessons are crucial for informing and refining future project designs, ensuring continuous improvement and the application of best practices.

Key Technical Requirements

Figure 1. Data Flow Diagram



The prototype for the financial consumer protection Suptech tool will have the following key elements:

Table 1. Key Requirements

COMPONENT	FEATURE		DESCRIPTION		PRIORITY
Web Portal	1.1	User and Financial	1.1.1	Automated bulk creation of users and financial institutions (FIs) via Excel files	1.1.1 HIGH
					1.1.2 HIGH

		institutions (FIs) Creation	1.1.2 Manual creation of users and FIs 1.1.3 Each user account can only be linked to one FI 1.1.4 Customize the maximum number of users for each FI	1.1.3 HIGH 1.1.4 HIGH
Web Portal	1.2	User and FIs Management	1.2.1 Filter by FIs, work teams, role, type of users, etc. 1.2.2 Delete and edit user accounts and FIs 1.2.3 Reset user account passwords 1.2.4 Activate/block users 1.2.5 Assign users to only one work team 1.2.6 Allow administrators and supervisors to create new user profiles, specifying details such as name, email, and role	1.2.1 HIGH 1.2.2 HIGH 1.2.3 HIGH 1.2.4 HIGH 1.2.5 HIGH 1.2.6 HIGH
Web Portal	1.3	User Authentication	1.3.1 Users will log in using the web portal 1.3.2 Existent SEPS user accounts will be authenticated using SEPS' Active Directory 1.3.3 Enable Multi-Factor Authentication (MFA) for enhanced security	1.3.1 HIGH 1.3.2 HIGH 1.3.3 HIGH
Web Portal	1.4	Customize Profile Roles	1.4.1 Define profiles such as Supervisor, Agent, Admin, and Customer, considering that one profile can be assigned multiple roles 1.4.2 Assign users to profiles based on their responsibilities and access needs. 1.4.3 Customize access control permissions for each role 1.4.4 Delete and edit role and profiles	1.4.1 HIGH 1.4.2 HIGH 1.4.3 HIGH 1.4.4 HIGH
Web Portal	1.5	Team Creation and Management	1.5.1 Allow the formation of teams with multiple users 1.5.2 Facilitate the addition and removal of team members 1.5.3 Assign tickets to teams based on category and FIs 1.5.4 Bulk creation of teams via Excel files 1.5.5 Manual creation of teams 1.5.6 Each user account can only be linked to one team 1.5.7 Each team can only be linked to one FI/SEPS.	1.5.1 MEDIUM 1.5.2 MEDIUM 1.5.3 MEDIUM 1.5.4 MEDIUM 1.5.5 MEDIUM 1.5.6 MEDIUM 1.5.7 MEDIUM
Web Portal	1.6	Ticket Types	1.6.1 Configure specific ticket types with customized fields to meet business needs. 1.6.2 Support various field types, including text, date, dropdown lists, and attached files. 1.6.3 Enable configuration to validate that attached files have a valid electronic signature, using a web service provided by SEPS.	1.6.1 HIGH 1.6.2 HIGH 1.6.3 MEDIUM
Web Portal	1.7	Custom Fields	1.7.1 Configure mandatory and optional fields based on the ticket type	1.7.1 HIGH
Web Portal	1.8	Categories and Subcategories	1.8.1 Organize ticket information into a hierarchical structure of categories and subcategories to facilitate classification and management.	1.8.1 MEDIUM
Web Portal	1.9	Submission	1.9.1 The system must generate a unique number for each ticket for tracking purposes	1.9.1 HIGH
Web Portal	1.10	Notification	1.10.1 The tool must be configurable by SEPS to generate automated emails based on system data.	1.10.1 MEDIUM
Web Portal	1.11	Business rules	1.11.1 The tool must be configurable to support workflow and automated validation and processing rules, such as alarms, referrals, duplicates handling and escalations.	1.11.1 MEDIUM
Web Portal	1.12	Collaboration	1.12.1 Provide role-based access and user interfaces for managing tickets, using centralized data storage.	1.12.1 HIGH
Web Portal	1.13	Configurable Stages	1.13.1 Define custom stages for the request lifecycle, such as "New," "In Progress," "Resolved," and "Closed."	1.13.1 HIGH 1.13.2 MEDIUM

			1.13.2 Implement automatic stage transitions based on specific rules.	
Web Portal	1.14	Dynamic Routing	1.14.1 Establish automated routing based on specific rules to efficiently direct tickets 1.14.2 Implement different routing paths depending on the ticket type	1.14.1 MEDIUM 1.14.2 MEDIUM
Web Portal	1.15	Custom Colors	1.15.1 Use distinct colors to visually identify and prioritize each type and category of tickets easily	1.15.1 LOW
Web Portal	1.16	SLA and Automation	1.16.1 Define and monitor Service Level Agreements (SLAs) to ensure timely responses and resolutions that meets customer expectations 1.16.2 Configure distinct SLAs tailored to different ticket types and customer requirements. 1.16.3 Implement automatic actions triggered by specific events, such as automatic escalations when SLAs are breached or resolution times exceed thresholds 1.16.4 Enable automatic notifications for critical activities or changes in request status	1.16.1 HIGH 1.16.2 MEDIUM 1.16.3 MEDIUM 1.16.4 LOW
Web Portal	1.17	Customer Portal	1.17.1 Allow customers to submit new tickets, attach documents, and track ticket statuses 1.17.2 Provide an intuitive and user-friendly interface for seamless customer interaction 1.17.3 Allow customers to check the current status and history of their tickets 1.17.4 Facilitate communication between customers and support agents through comments and updates 1.17.5 Enable file attachments for comprehensive issue documentation	1.17.1 HIGH 1.17.2 HIGH 1.17.3 HIGH 1.17.4 HIGH 1.17.5 HIGH
Web Portal	1.18	Internal Chatter	1.18.1 Facilitate internal communication among support agents for sharing notes and updates on tickets. 1.18.2 Provide accessible conversation and comment history for all agents based on their role-specific access 1.18.3 Schedule tasks and activities related to tickets to enhance organization and efficiency 1.18.4 Implement automatic reminders and alerts for pending activities	1.18.1 HIGH 1.18.2 HIGH 1.18.3 HIGH 1.18.4 HIGH
Web Portal	1.19	Ticket Assignment	1.19.1 Enable automatic or manual assignment of tickets to specific agents or teams based on their expertise and workload 1.19.2 Establish assignment rules based on default routes for each ticket type	1.19.1 HIGH 1.19.2 MEDIUM
Web Portal	1.20	Reassignment and Tracking	1.20.1 Reassign tickets as needed and maintain a detailed log of the time spent on each ticket 1.20.2 Monitor agent performance and track resolution times	1.20.1 HIGH 1.20.2 MEDIUM
Web Portal	1.21	Integration w/internal and external systems	1.21.1 Consume the following web services: - Web service for identity validation 1.21.2 Publish web services for: - Ticket creation - Ticket status inquiry	1.21.1 HIGH 1.21.2 HIGH
Web Portal	1.22	Configuration workflow	1.2.1 Configure Two Types of Tickets: - First Instance Claim (Claims filed directly to the FI) - Second Instance Claim (Claims that are escalated to SEPS) 1.2.2 Configure Ticket Statuses. Eg.: - New	1.22.1 HIGH 1.22.2 HIGH 1.22.3 HIGH 1.22.4 HIGH 1.22.5 HIGH 1.22.6 HIGH

			<ul style="list-style-type: none"> - In Progress - Rejected - Closed <p>1.2.3 Generate Subcategories. Eg.:</p> <ul style="list-style-type: none"> - Closed with Attention - Closed by Withdrawal - Closed Due to No Response <p>1.2.4 Send Notification Emails to the User During the Following Phases. Eg.:</p> <ul style="list-style-type: none"> - New - In Progress - Rejected - Closed <p>1.2.5 For each ticket type, add the following fields and validations (Annex 1)</p> <p>1.2.6 To configure the claim management process, refer to Annex 2</p>	
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COMPONENT	IDENTIFICATION	FEATURE	DESCRIPTION	PRIORITY
Chatbot	2.1	Start Conversation	The user starts a conversation with the Chatbot.	HIGH
Chatbot	2.2	NLP/GenAI	The chatbot must be able to interact in Spanish and optionally in Quichua to ensure accessibility and understanding. It will interact with the entire regulatory library relevant to the popular and solidarity economy in Ecuador.	HIGH
Chatbot	2.3	Channel integration	<p>The chatbot must support integration with web pages (WebChat) and be attached to SEPS institutional website.</p> <p>The chatbot must support integration with social media (Facebook, WhatsApp, Instagram),</p>	<p>HIGH</p> <p>LOW</p>
Chatbot	2.4	Automate operative task	The chatbot must offer users guided assistance for two main processes: registering claims and addressing inquiries related to any aspect under SEPS supervision. Depending on the inquiry, the chatbot will ask further questions to clarify the query's scope and meaning. It will then reference the relevant legal regulations and detail the procedure to be followed	HIGH
Chatbot	2.2	Accept Data Protection Agreement	The chatbot asks the user to accept a data protection agreement before continuing	HIGH

Chatbot	2.3	Enter Personal Information	The user must enter their name and email address	HIGH
Chatbot	2.4	Display Menu	The chatbot displays a main menu with two options: 1.Claim 2. Inquiry	HIGH
Chatbot	2.5	Enter ID for Complaints	The user enters their personal ID to validate their identity with the Civil Registry of Ecuador database <ul style="list-style-type: none"> If the user doesn't have an account, they are asked to create one, including OTP verification If the user already has an account, an OTP is sent to the registered email from activity 2.3, which the user must enter If the OTP entry is incorrect, the user can try again with a new OTP. If the code is correct, proceed to the next activity 	MEDIUM
Chatbot	2.6	Display claim Menu	The chatbot shows the claims menu categorized by type (approx. 15 types) related to financial products and services	MEDIUM
Chatbot	2.7	Select Claim Type	The user selects the type of claim based on their need. The chatbot then asks if it is a new claim, which will be routed to the financial entity, or a second instance claim, which will be routed to SEPS	MEDIUM
Chatbot	2.8	Enter Claim (interactive dialogue)	<p>FIRST INSTANCE (ENTITY)</p> <p>1. The user enters the claim and interacts with the chatbot through a series of questions and answers to complete the SEPS claim form, including:</p> <ul style="list-style-type: none"> Background of the complaint Controlled entity data: (validating RUC or company name with the registry) User's role (if they are a legal representative or have a special power of attorney, they must enter the affected user's information) Priority attention group (elderly, disabled, women, etc.) Specific request Attached documents (evidence of the claim) <p>2. The chatbot processes whether the claim is valid or not.</p> <ul style="list-style-type: none"> If the claim is not valid, it rejects it and redirects the user to the claims menu If the claim is valid, it proceeds to the next activity 	MEDIUM

Chatbot	2.09	Capture Ticket Number	The chatbot displays the ticket number generated on the web portal	MEDIUM
Chatbot	2.10	Send Ticket number to User	The chatbot sends the ticket number to the user's registered email	MEDIUM
Chatbot	2.11	Register Claim on Web Portal	Simultaneously with emailing the user, the claim data is registered on the web portal along with the corresponding ticket number	MEDIUM
Chatbot	2.12	Enter Ticket Number	SECOND INSTANCE CLAIM (Claim escalated to SEPS) If the user requests escalation to SEPS (second instance), they must enter the generated ticket number from the first instance. The chatbot validates the following: <ul style="list-style-type: none"> • If the ticket is within the timeframe, it informs the user that their request is in process and concludes the activity • If the first-instance ticket is closed, it proceeds to be attended in the second instance, provided the user is not satisfied with the entity's response or if there's no response 	MEDIUM
Chatbot	2.13	Inform the User	If ticket within timeframe The Chatbot informs the user that the first-instance ticket is still within the timeframe and concludes the activity	MEDIUM
Chatbot	2.14	Enter Second instance claim	If ticket closed The user files a second instance claim by interacting with the chatbot through a series of questions and answers to complete SEPS' second instance claim form. This includes: <ul style="list-style-type: none"> • Entering the non-conforming comment along with the entity's response or lack thereof. • Attaching supporting documentation. Subsequently, the Chatbot proceeds with activity 2.9 and continues the process.	MEDIUM
Chatbot	2.15	Enter ID for Inquiries	The user enters their personal ID to validate their identity with the Civil Registry of Ecuador database.	HIGH

Chatbot	2.16	Display Inquiry Menu	The chatbot shows the inquiry menu categorized by type (approx. 15 types), including inquiries related to regulations, service procedures, technical information structures manuals, claim status, and others.	HIGH
Chatbot	2.17	Choose Inquiry Option	The user selects the inquiry type according to their need.	HIGH
Chatbot	2.18	Submit Inquiry (interactive dialogue)	The user enters the inquiry details and engages in an interactive dialogue with the chatbot. The chatbot uses GenAI to analyze the text and process the inquiry. <ul style="list-style-type: none"> If the inquiry is invalid, it returns to the inquiry menu from activity 2.17 If the inquiry is valid, it proceeds to the next activity 	HIGH
Chatbot	2.19	Answer Inquiry	The Chatbot responds to the inquiry based on the current legal regulations, service procedures, and technical information structures manuals, resulting in one of the following outcomes: <ul style="list-style-type: none"> User is satisfied User is not satisfied or requires additional information 	HIGH
Chatbot	2.20	Conduct Satisfaction Survey and Conclude	User is Satisfied If the user is satisfied with the inquiry response, a satisfaction survey is sent, and the inquiry concludes.	MEDIUM
Chatbot	2.21	Start livechat	User not Satisfied or Needs More Information If the user is not satisfied or needs more information: <ul style="list-style-type: none"> For general inquiries, they are transferred to an agent for online chat support For information structure inquiries, they are redirected to the Collection Service Center 	HIGH
Chatbot	2.22	Receives answer from SEPS Agent	For general inquiries: The SEPS agent provides a real-time response to the user's inquiry through the online chat	HIGH
Chatbot	2.23	Conduct Satisfaction Survey and Conclude	For general inquiries: The user completes and sends the satisfaction survey, and the inquiry concludes.	MEDIUM
Chatbot	2.24	Integration w/internal and external systems	Consume the following web services: Ticket creation Ticket status inquiry Web service for identity validation	

Chatbot	2.25	Redirect to Service Center	For information structure inquiries: If the inquiry is about information structures related to a specific entity, the chatbot redirects the user to the collection service center.	MEDIUM
Chatbot	2.26	Chatbot Configuration	For Chatbot flow configuration, refer to annex 3.	

COMPONENT	IDENTIFICATION	FEATURE	DESCRIPTION	PRIORITY
Reporting and Analytics	3.1	Claims and Inquiry Status Report	<p>Claims and Inquiry Status Report Provides an overview of all claims and inquiries received over a specific period. Included Fields:</p> <ul style="list-style-type: none"> • Total number of claims and inquiries • Status (new, in process, resolved, closed) • Average resolution time • Financial entity • Assigned agent • Creation date 	HIGH
Reporting and Analytics	3.2	Resolution Time Report	<p>Analyzes the average resolution time for claims and inquiries: Included Fields:</p> <ul style="list-style-type: none"> • Average resolution time by type of claim and inquiry • Identification of claims and inquiries with resolution times outside the SLAs 	HIGH
Reporting and Analytics	3.3	Trends and Patterns Report	<p>Identifies trends and patterns in claims and inquiries over time.</p> <ul style="list-style-type: none"> • Monthly/quarterly/biannual/annual trends of claims/inquiries • Analysis of the increase or decrease in claims by product type or financial entity • Identification of recurring patterns in claims/inquiries by sex, level of education, canton and province of domicile of the individual, age • Most frequent or cyclical complaint types • Concentration of complaints by regulated entity or segment • Group by geographic location of the complainant or financial entity. by sex, level of education, canton and province of domicile of the individual, age • Ranking of entities with the highest claims, relative to the number of partners and clients of the entity 	MEDIUM

Reporting and Analytics	3.4	Claim Information Cube	<p>Designed to analyze data related to consumer protection, claims, and inquiry management</p> <p>Dimensions:</p> <ul style="list-style-type: none"> Time: Year, Quarter, Month, Day Geography: Country, Region, City Ticket type Claim type: Complaint category, Complaint subcategory Financial Entity: Entity name, Entity type Consumer Demographics: Age, Gender, Socioeconomic group Claim Status: New, In Process, Resolved, Closed Interaction Channel: Web, Chatbot, Phone, Email <p>Facts:</p> <ul style="list-style-type: none"> Total number of claims received Number of claims handled within and outside the deadline Average resolution time for claims Satisfaction scores from surveys Number of interactions per channel Monetary value of claims Total responses provided by the chatbot <p>Update and Access:</p> <ul style="list-style-type: none"> Daily updates from the transactional system and related information sources Accesses will be managed according to SEPS BI platform Development will be carried out on the SEPS BI platform. 	MEDIUM
Reporting and Analytics	3.5	Dashboard Based on Complaint Information Cube	<p>The dashboard should include at least the following indicators:</p> <ul style="list-style-type: none"> % of claims resolved with favorable pronouncements vs. total complaints managed in the Suptech tool Total number of unresolved claims by the entity vs. total claims presented to the entity Percentage of rejected claims % satisfaction through cyclical survey 	MEDIUM
Reporting and Analytics	3.6	User Information Cube	<p>Designed to analyze data related to users who file a complaint. This cube will allow detailed analysis of users, their interactions with financial institutions, and their demographic characteristics</p> <p>Dimensions:</p> <ul style="list-style-type: none"> User: User ID, Name, Identification (ID/RUC), Date of birth Time: Year, Quarter, Month, Day Geography: Country, Region, City Entity name, Entity type 	MEDIUM

			<ul style="list-style-type: none">• User Demographics: Age, Gender, Socioeconomic level, instruction level• Type of Claim/Inquiry: Claim category, Claim subcategory• Claim Status: New, In Process, Resolved, Closed• Interaction Channel: Web, Chatbot, Phone, Email• Facts:• Number of Claim/Inquiries• Resolution Time: Average resolution time for claim• Customer Satisfaction: Satisfaction scores from surveys• Number of Credits: Total number of credits per user• Credit Amount: Monetary value of credits per user• Number of Associated Cooperatives: Total cooperatives the user has credit with• Number of Interactions: Number of interactions per channel <p>Update and Access:</p> <ul style="list-style-type: none">• Daily updates from the transactional system and related information sources• Accesses will be managed according to SEPS BI platform• Development will be carried out on the SEPS BI platform.													
Reporting and Analytics	3.7	User Dashboard Associated with the User Information Cube of Complaints and Inquiries for SEPS	<p>Present or embed a dashboard on the WEB portal with the following information from the information cube (example):</p> <ul style="list-style-type: none">• User: Juan Pérez ID 1234567890• Age: 35 years• Gender: Male• Socioeconomic Level: Middle• City: Quito• Number of Claims: 5• Number of inquiries: 7• Top 3 claims categories: Incorrect charges, poor service, interest calculation• Top 3 inquiry categories: Electronic services, directive update, auditor registration• Average Resolution Time for Claims: 10 days• Position Type: Secretary <table><tr><th>FI's</th><th>Total Credit Amount</th><th>Credit Risk Rating</th></tr><tr><td>ABC Cooperative</td><td>1000</td><td>A1</td></tr><tr><td>XYZ Cooperative</td><td>2000</td><td>B2</td></tr><tr><td>DEF Cooperative</td><td>3000</td><td>E</td></tr></table>	FI's	Total Credit Amount	Credit Risk Rating	ABC Cooperative	1000	A1	XYZ Cooperative	2000	B2	DEF Cooperative	3000	E	MEDIUM
FI's	Total Credit Amount	Credit Risk Rating														
ABC Cooperative	1000	A1														
XYZ Cooperative	2000	B2														
DEF Cooperative	3000	E														

Out of Scope:

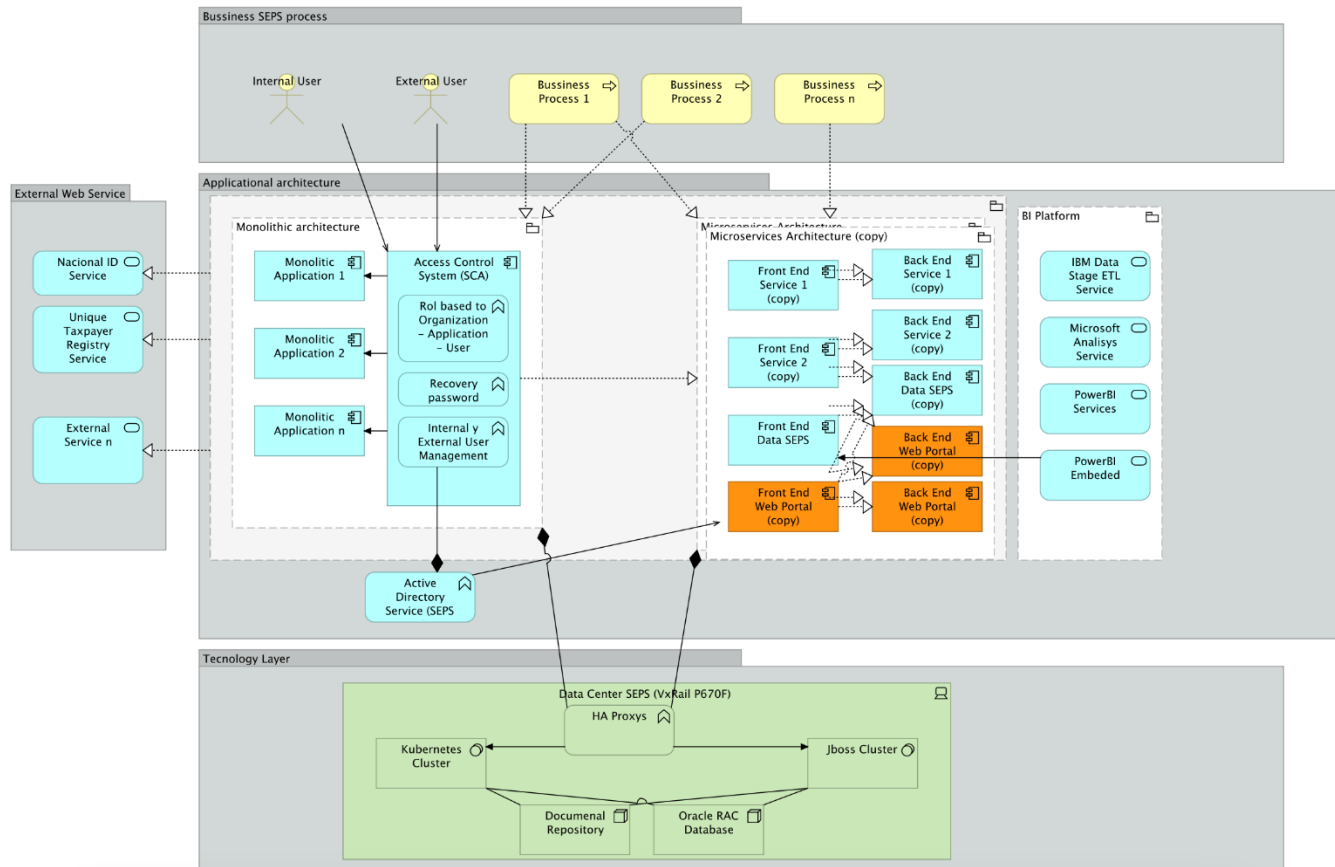
- Aspects related to hardware infrastructure improvement, such as physical servers, network infrastructure, and other hardware components that could be required for the deployment.
- Adaptations to the CMS due to changes in financial regulations post-deployment.
- Financial Service Provider Internal Workflows automatization

Integration

1. Web Portal

Upon completion of the web portal prototype, the code must be integrated into the following environment (preferably -but not limited to- Java). The proposal should describe how the vendor will facilitate adoption of the code in SEPS environment.

Aspect	Backend	Frontend
Languages and Frameworks	Java, Spring Boot, Hibernate/JPA, QueryDsl	JavaScript (ES6+), React, ECMAScript 2023
Databases	Oracle, SQL	
Technologies and Tools	Maven/Gradle, Git, Docker, Kubernetes, RESTful APIs, JUnit/Mockito, CI/CD	Redux/MobX, React Router, Functional Components, Styled Components/SASS, Axios/Fetch, SPA, Webpack/Babel, ESLint/Prettier, Jest/Enzyme, CI/CD, Git
Dependency Management	Maven/Gradle	yarn/npm
Error Handling	Custom Exceptions, Error Messages	Global Request Handling, Global Exception Handling, Loaders, Alerts
Testing	Unit Testing (JUnit/Mockito), Integration Testing, Postman Documentation, Code Validation (Kiuwan)	Unit Testing (Jest/Enzyme), Integration Testing, Code Validation (Kiuwan)
Documentation	Jswagger, Postman	JSDoc
Security	Spring Security, Input Validation, OAuth2, JWT, CORS, PMD	Input Validation, XSS Protection, CORS, CSRF
Development Project Structure	SEPS Backend Project Structure Template, Microservices	SEPS Frontend Project Structure Template, Microfrontends
Styling	CheckStyles, PMD	CSS-in-JS, Preprocessors (SASS/LESS)
Performance	Apache JMeter, Postman, PMD CheckStyles	Lazy Loading, Optimization (Webpack)
Accessibility	Coding Standards, Structure Return Standard in Endpoints	WCAG, Accessibility Testing (Lighthouse)



The web portal to be developed should be deployed in the SEPS data center, for which the following guidelines must be considered:

- Prepare the RFC document detailing the deployment and rollback procedure.
- The development environment will be provided locally by the vendors' developers and will access SEPS IT resources via VPN.
- Use the SEPS version control repository (gitlab.seps.gob.ec).
- The deployment process includes testing and certifying the software in a pre-production environment before deploying it to production.

2. AI-Chatbot

For the deployment of the AI chatbot, the vendor must detail the process for transitioning the solution to live production.

3. Data Analytics

For the development of reports, dashboards, and information cubes, the following tools may be used, but are not limited to: (1) IBM DataStage - etl (2) IBM Netezza - warehouse (3)

Microsoft analysis services - information cubes (4) powerbi - bi reports (5) jasper - transactional reports.

Applicable Laws and Regulations

The engagement scoped by this PoC document may require the Agency to share certain data with the Lab and one or more vendors or innovators working as part of the Lab team. Several laws and regulations apply to the collection, processing, and sharing of financial and personal information, including:

- Monetary and Financial Code¹
- Organic Law of Popular and Solidarity Economy²
- Organic Consumer Defense Law³
- Financial Regulation Board Resolutions⁴
- Resolutions of the Superintendence of Popular and Solidarity Economy⁵
- National Financial Inclusion Strategy⁶
- Organic Law of Public Contracting⁷
- Law of Electronic Commerce, Signatures and Data Messages⁸
- Law for the Optimization and Efficiency of Administrative Proceedings⁹
- Law for the Protection of Personal Data¹⁰
- Organic Administrative Code¹¹
- National Cybersecurity Policy.¹²

¹ <https://www.seps.gob.ec/base-legal/>

² Ibidem.

³ <https://www.dpe.gob.ec/>

⁴ <https://jprf.gob.ec/resoluciones-de-la-junta-de-politica-y-regulacion-financiera/>

⁵ <https://www.seps.gob.ec/resoluciones-de-entidades-del-sector-financiero-popular-y-solidario/>

⁶ <https://jprf.gob.ec/la-junta-de-politica-y-regulacion-financiera-emite-la-politica-y-estrategia-nacional-de-inclusion-financiera/>

⁷ https://portal.compraspublicas.gob.ec/sercop/wp-content/uploads/2021/04/losncp_actualizada1702.pdf

⁸ <https://www.telecomunicaciones.gob.ec/wp-content/uploads/downloads/2012/11/Ley-de-Comercio-Electronico-Firmas-y-Mensajes-de-Datos.pdf>

⁹ <https://www.gobiernoelectronico.gob.ec/wp-content/uploads/2019/08/ley-de-optimizacio%CC%81n-de-tramites-administrativos.pdf>

¹⁰ <https://www.telecomunicaciones.gob.ec/wp-content/uploads/2021/06/Ley-Organica-de-Datos-Personales.pdf>

¹¹ <https://www.gobiernoelectronico.gob.ec/wp-content/uploads/2020/11/COA.pdf>

¹² <https://www.telecomunicaciones.gob.ec/wp-content/uploads/2021/06/Acuerdo-No.-006-2021-Politica-de-Ciberseguridad.pdf>

II. Project Structure

Phase 1

This phase has 3 stages as detailed below:

1. Kickoff and interface design, including technical integration specifications
2. Development of the live-production-ready prototype
3. Deployment, Integration, testing, and signoff of the live-production-ready prototype in the SEPS Test environment.

Throughout all project steps, vendors are expected to meet weekly with key stakeholders of the Agency and the Lab's Launchpad team, to ensure close coordination and agility.

1. Kickoff and interface design, including technical integration specifications

The selected vendor, in coordination with the Lab's Launchpad team will gather requirements from the Agency and produce an initial Design Document that includes integration and user interface specifications. This document will explain the scope that will be implemented in the solution. This is the main reference document that will be used to develop, test, and deliver the solution for acceptance. It is a must that it has accurate and correct information about the business needed requirements.

This living document should include specifications for the client-facing portion of the prototype, communicated in a manner such that clients of the prototype can understand how to integrate with systems and processes, submit data, and use the system without necessarily understanding the entire architecture behind the software. It should include a traceability matrix listing all solution modules/functions/features, the source of requirements and establishes criteria for user acceptance testing for use during the testing phase.

This Document is to be shared as needed with any other key stakeholders (e.g., vendors of relevant software used by the Agency, any financial institutions needing to integrate) to allow them to develop integrations and/or adapt existing software during the development phase. The vendor will also provide a project plan/schedule detailing high level project schedule listing start and end dates of main phases, milestones, and activities. The schedule will be following the chosen project lifecycle chosen for the project.

2. Development of the live-production-ready prototype

The vendor will swiftly move from design/documentation to mockups and/or begin coding the solution with iterative review/feedback work sessions with the project team. The project team including IT, the Lab and vendor will meet weekly to co-create the solution, discuss design and requirements, documenting user stories and key performance indicators, reviewing and iterating on mockup, then testing and iterating the features and functionality with hands-on live test application. The vendor will develop and document a test plan alongside user stories and requirements gathering.

The project team and vendor will work asynchronously between meetings to make progress on development, testing and documentation iteratively building on each week's progress. The vendor will track progress, timelines, next steps, meeting minutes, decisions/agreements, and other project management responsibilities.

3. Deployment, Integration, Testing, and signoff of the live-production-ready prototype

Once the prototype has been completed to the satisfaction of the involved parties, integration and testing into the SEPS environment can begin. The working prototype will be tested with the Agency, based on any user acceptance criteria defined during the design stage, to allow the vendor to ensure that the prototype is functional with real data before it is scaled into production. This approach also minimizes the risk of interruption due to unforeseen technology failure and serves to inform estimates of the cost to scale the prototype to a production-grade service.

A cyclical final test of the prototype and improvements by the developers must be done until the product is adherent to the functional specification document as reflected through the completion of the user acceptance testing criteria. Once UAT is complete, the prototype package will be expected to be deployed into the SEPS' production environment and the code delivered, including source and object code, training materials, project documentation, and other items to be specified in the Project Agreement with the selected vendor.

Phase 2

Following successful delivery and deployment of the prototype in the SEPS Test environment in Phase 1, the Agency may opt to engage with the vendor for assistance in deploying a full solution into the Production environment (including technical requirements and/or components that were not feasible by the December deadline). The production roadmap will inform Phase 2 with the necessary requirements to support the SEPS IT team with a deployment plan that includes all

necessary support and documentation and resources needed for full implementation. The solution provider will be expected to conduct business user training and technical training along with handover and documentation of the solution. Should the Agency opt to engage the vendor for this effort, it will be funded through a separate Project Agreement.

TIMELINE

The project should commence as soon as practically possible after the Project Agreement (contract) comes to effect. This Project will deliver a live-production-ready prototype that will be tested, delivered and deployed in the SEPS' test environment by December 2024.

III. Vendor Selection

1. PROJECT AWARD

The successful applicant will:

- Be awarded a grant from the Bill & Melinda Gates Foundation to develop and test the required solution. This is a fixed-sum contract to cover all the applicant's expenses related to the development, testing work, including staff time, hardware, software, travel, and all other project-related expenses.
- Be listed in the Lab's online [Vendor Database](#), a dynamic, web-based platform to explore and connect with solution providers who have been active in the global suptech market.
- Be invited to the Lab's SupTech Week - the largest gathering of the suptech community globally, where you will have the opportunity to demo the prototype to potential clients and connect with funders.
- Be recognised in a case study the Lab will write following the successful completion of this project, distributed through the Lab's direct newsletter to a list of over 20,000 global contacts in the suptech space, and on LinkedIn.
- Engage with the suptech community through the Lab's hackathons and tech sprints and receive tailored coaching from the Lab on coordinating suptech projects with Financial Authorities.
- Enhance your platforms offerings with new tools developed through this collaboration.

2. KEY FEATURES OF THIS INITIATIVE

- Blind review process: A panel of expert reviewers will score anonymised proposals without knowing the name of the vendor submitting them

- **Competitor scorecard:** Applications will be assessed by the panel using a set of scoring metrics and weighing the relative importance of each attribute.
- **Rapid turnaround time:** We will select the winning vendor and award 50% of the grant within 15 days from submission of a valid invoice. The remaining 50% of the award will be granted in one installment upon completion of the deliverables according to projected timelines.

3. RULES AND GUIDELINES

a. Submission Requirements

Selected vendors must demonstrate that their proposed solution meets the needs of the Project, both in terms of technical topic responsiveness, execution, and innovative approach.

Please submit your RFP via this [form](#). In the 'Proposal' section, please submit your proposal following the prescribed structure below:

Part 1 - Brief company background:

- Technical expertise to effectively implement the project
- List of representative projects
- Managerial capabilities and relevant experience to effectively implement the project
- Adequate bilingual (English/Spanish) resources to devote to the successful implementation

This section should be no longer than 4 pages (font Century Gothic, size 11, line spacing multiple at 1.15)

Part 2 - Technical proposal:

- **Detailed technical specification and architecture.** This should address components of the key technical requirements in Section I. This section should be no longer than 8 pages (font Century Gothic, size 11, line spacing multiple at 1.15). A technical architecture diagram should be included.
- **Execution plan and resourcing.** Indicative development / implementation schedule based on the timeline parameters set out above and the project structure set out in Section II. This section should be no longer than 4 pages (font Century Gothic, size 11, line spacing multiple at 1.15).
- **Additional element for consideration.** A free-form response to elaborate on the innovative aspects of the solution you propose and why your agency should be awarded this competition. This section should be no longer than 1 page (font Century Gothic, size 11, line spacing multiple at 1.15).
- **Indicative development / implementation schedule.** Based on the timeline set out above.

- **Information needed for due diligence**

Any questions and requests for clarification should be sent via email to suptech-launchpad@jbs.cam.ac.uk with "RFP SEPS..." in the subject


b. Tips for applicants

1. Vendors may submit proposals for developing a single component (e.g., an AI chatbot), a combination of components (e.g., a web portal and a data analytics tool), or all three components together (a web portal, an AI-chatbot, and a data analytics tool). Proposals should identify specifically which requirements listed in the Key Technical Requirements section are proposed to be included in the December 2024 solution, and which would be subsequently phased for full implementation with proposed budget and timeline for each component.
2. Your proposal must demonstrate an innovative approach that meets all stated goals and complies with all restrictions and guidelines.
3. Personal and organizational information should be provided separately from the proposal. Proposals will be sent to reviewers without personal or organizational information. Do not include any identifying information directly in your proposal.
4. In addition to subject matter experts, your proposal will be reviewed by a panel with broad expertise and a track record in identifying innovations – these reviewers may not be deep domain experts in your field. You must describe your ideas in unambiguous language without the use of jargon unique to your field.
5. The work proposed in your application must include a clear set of key activities required to develop, test, and deploy the prototype solution. Proposals with vague descriptions or vague methodologies will not be funded.

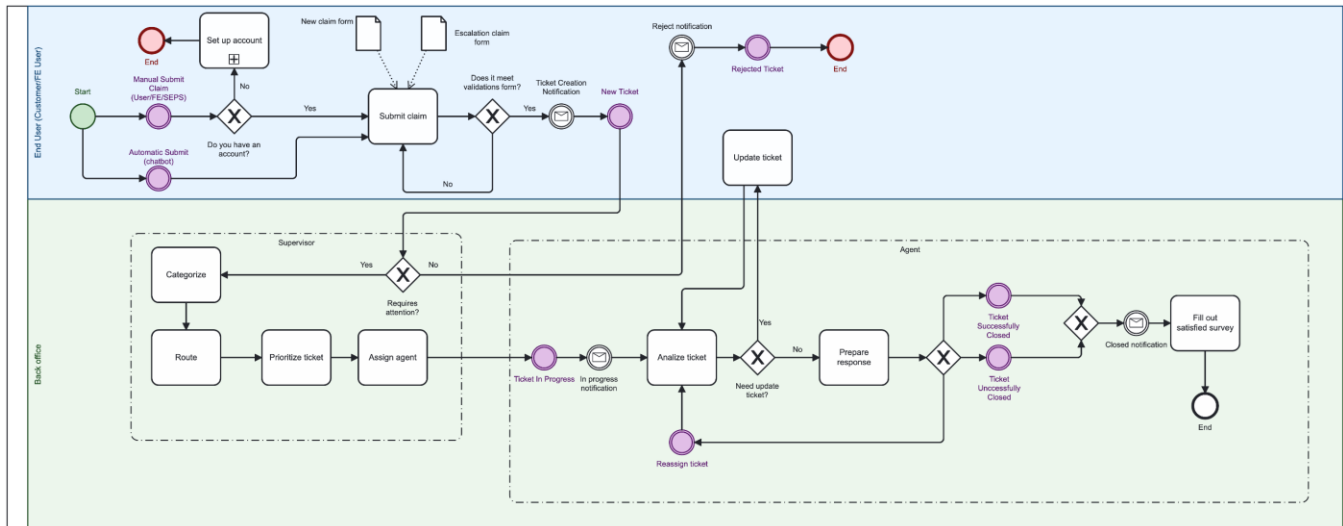
c. Disclaimer

The Lab reserves the right to edit, invalidate, terminate, and/or reissue this RFP at any time and for any reason. The Lab also reserves the right to select a vendor through an alternate method and/or adopt an alternate timeline for vendor selection that differs from the method and/or timeline described in this document, the websites of the Lab and Launchpad, and any other communications related with the process. Furthermore, the Lab expressly disclaims responsibility for any costs incurred by any vendor in responding to this RFP, regardless of whether the RFP is edited, invalidated, terminated, and/or reissued at any time and for any reason.

Appendix 1. Claims input form

 SUPERINTENDENCIA DE ECONOMÍA POPULAR Y SOLIDARIA		FORMULARIO PARA PRESENTACIÓN DE RECLAMOS	
Lugar y Fecha:			
INDICACIONES PARA LLENAR EL FORMULARIO 1. El formulario deberá ser presentado debidamente firmado. (firma electrónica o autógrafa) 2. Las notificaciones y/o comprobantes que se generen producto de la atención del presente requerimiento serán enviadas al correo electrónico del remitente, según los registros que se encuentren disponibles en el formulario. 3. Los campos del presente formulario no podrán ser modificados por los usuarios. 4. La petición debe determinar claramente que es lo que pretende o solicita con la presente			
Marque con una X si pertenece algún grupo de atención prioritaria de acuerdo Art. 35 de la Constitución		Marque con una X si tiene algún tipo de discapacidad	
SI :	NO :	SI:	TIPO:
1.- DATOS DEL USUARIO			
Número de identificación:		Nombres y Apellidos:	
Teléfono:		Canal para notificaciones- Seleccione:	
Correo electrónico :		Calidad en la que comparece-Seleccione:	
2.- ASUNTO SOBRE EL CUAL VERSA SU PETICIÓN (marque con una x)			
Seleccione			
Seleccione			
3.- ANTECEDENTES			
a) Relato de los hechos o acciones de forma clara, precisa y cronológica, singularizando la fecha y lugar en que ocurrieron:			
4.- PETICIÓN CONCRETA (clara y precisa)			
5.- DOCUMENTOS Y PRUEBAS QUE ADJUNTA			
Detalle de pruebas (documental, digital) o describa el motivo por los cuales no presenta:			
6.- DATOS DE LA ENTIDAD CONTRA LA QUE SE PRESENTA ESTE RECLAMO			
Nombre de la Entidad:		RUC de la Entidad:	
Nombre del Representante Legal		Cargo:	
7.- DECLARACIÓN, ACEPTACIÓN, Y AUTORIZACIÓN*			
1. Autorizo a este organismo de control, a realizar cuanto análisis y verificación se consideren necesarias, por lo cual, expresamente autorizo a la Superintendencia de Economía Popular y Solidaria a acceder, solicitar y recabar mis datos personales y de mis operaciones de carácter financiero, acorde a los artículos 352 y 353 del Código Orgánico Monetario y Financiero, sin que esto implique divulgación a terceras personas que no sean parte del procedimiento; exceptuando aquellas que por mandato de la ley u orden de autoridad competente, pueden acceder a toda la información de la Superintendencia. 2.- Acepto que las notificaciones sobre el presente reclamo se me realice(n) al (los) correo(s) electrónico(s) señalados en el presente documento, en consecuencia me comprometo a revisar el (los) correo(s) electrónico(s) señalado(s) en este formulario y a mantenerlo(s) habilitado(s) para recibir las correspondientes notificaciones. 3.- Conozco que el artículo 187 del Código Orgánico Administrativo establece que la denuncia no es vinculante para iniciar el procedimiento administrativo y la decisión de iniciar o no el procedimiento se comunicará al denunciante. 4.- Acepto que la veracidad y autenticidad de la información proporcionada por el denunciante en la gestión del presente trámite, consignados en este formulario, y sus documentos anexos, son de exclusiva responsabilidad del peticionario. 5.- Conozco que, en aplicación del Art. 40 del Código Orgánico Administrativo, debo abstenerme de emplear actuaciones dilatorias en los procedimientos administrativos; de efectuar o aportar, a sabiendas, declaraciones o documentos falsos; o, formular afirmaciones temerarias u otras conductas contrarias al principio de buena fe. 6.- Acepto acogerme a las disposiciones pertinentes, de la Resolución No. SEPS-IGT-SGE-IGJ-2018-016, de 5 de julio de 2018, emitida esta Superintendencia, que contiene la "NORMA DE CONTROL PARA EL ENVÍO Y RECEPCIÓN DE INFORMACIÓN Y NOTIFICACIONES". 7.- Las comunicaciones relacionadas con la denuncia, incluyendo el presente formulario, podrán ser enviadas a través del sistema en línea de recepción e ingreso documental disponible en la página web institucional de la Superintendencia de Economía Popular y Solidaria www.seps.gob.ec o en las oficinas de este organismo de control, siempre que cuenten con FIRMA ELECTRÓNICA.			
8.- FIRMAS			
Firma de la persona interesada o su representante:		Abogado patrocinador (Opcional):	
Nombre:	Nombre:	Teléfono de contacto:	
Nro. de identificación:	Mat. Prof. Nro.:	Correo electrónico	

Appendix 2. Web Portal Diagram



Appendix 3. Web Portal + AI Chatbot Diagram

