Debt Recovery System

Functional Requirement Document

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1.   Introduction

1.1.   Purpose

The purpose of developing the Debt Recovery System (DebtX) is to streamline and enhance the efficiency of arrears collection and equipment collection processes at SLT. This approach plans to reduce financial losses from unpaid arrears and unreturned equipment. DebtX improves accountability, tracking, and communication between Debt Recovery Companies (DRCs) and Recovery Officers (ROs) to ensure quick case resolution while following legal and organizational policies. Also, commission calculations for Debt Recovery Companies (DRCs) based on resolved cases are planning to be processed through the DebtX system.

1.2.   Scope

The Debt Recovery System (DebtX) is designed to automate and optimize the debt recovery process, addressing inefficiencies in manual workflows while ensuring compliance with organizational and legal requirements. It will feature Collecting incident data directly from Data Lake, Individual incident registration and registration of Bulk of incidents, and automated case assignment to distribute cases effectively among Debt Recovery Companies (DRCs). A mobile portal will enable ROs to update case details, track progress, and record negotiations in real time, ensuring transparency and reducing delays.

The system will include real-time notifications and alerts to keep stakeholders informed of critical updates and deadlines. Progress tracking tools and interactive dashboards will provide SLT officers and management with insights into recovery activities, enabling improved performance evaluation. Integration with existing systems (BSS, OSS, and CRM, SMS, and Email platforms) will ensure streamlined data flow, while the system's legal and mediation board workflows will simplify case escalations.

Additionally, the system will facilitate the creation and management of Letters of Demand (LOD), allowing users to generate, preview, and distribute LODs efficiently, based on predefined criteria. The system will also automate commission calculations, ensuring accurate and timely payments to DRCs based on successful recoveries. The system will facilitate the write-off process for unsuccessful cases and case abandoned process or withdrawal process in the middle of the recovery process for any case. Successful cases will be closed at the final stage.

1.3. Audience (Developers, Testers, Business Owners, Stakeholders)

The Debt Recovery System (DebtX) caters to various audiences with distinct roles:

Business Owner

- Role: Oversee the strategic implementation and success of the Debt Recovery System (DebtX), ensuring alignment with business objectives and financial goals..
- Responsibilities:
  - Define the vision, goals, and KPIs for DebtX.
  - Approve budget, resources, and timelines for system development.
  - Ensure compliance with regulatory and financial requirements.
  - Collaborate with stakeholders to optimize debt recovery processes.
  - Review reports and dashboards to assess system effectiveness and ROI.
  - Provide feedback to enhance system performance and user experience.

Development Team

Business Analysts (BA)

- Role: Translate business needs into technical requirements.
- Responsibilities:
  - Gather and document requirements.
  - Collaborate with developers and testers to clarify and refine features.
  - Address risks, constraints, and dependencies.

Developers

- Role: Build and implement the system.
- Responsibilities:
  - Develop features like case management, workflows, dashboards, and integrations.
  - Ensure performance, scalability, and security.
  - Address technical challenges like data synchronization and automation.

Testers

- Role: Validate system functionality and performance.
- Responsibilities:
  - Test features, integrations, and workflows against acceptance criteria.
  - Conduct UAT to confirm alignment with business requirements.
  - Ensure data synchronization, report accuracy, and security compliance.

Stakeholders

- Role: Define business goals and validate outcomes.
- Key Stakeholders:
    - SLT Recovery Officers: Assign and monitor cases, evaluate performance.
    - Debt Recovery Companies (DRCs): Manage cases and provide updates.
    - Recovery Officers (ROs): Update case details and negotiate settlements.
    - SLT Legal Team: Handle escalations and manage legal workflows.
    - SLT Finance Team: Oversee commission calculations and financial reporting.
    - SLT Management: Use dashboards to optimize strategies and provide feedback.
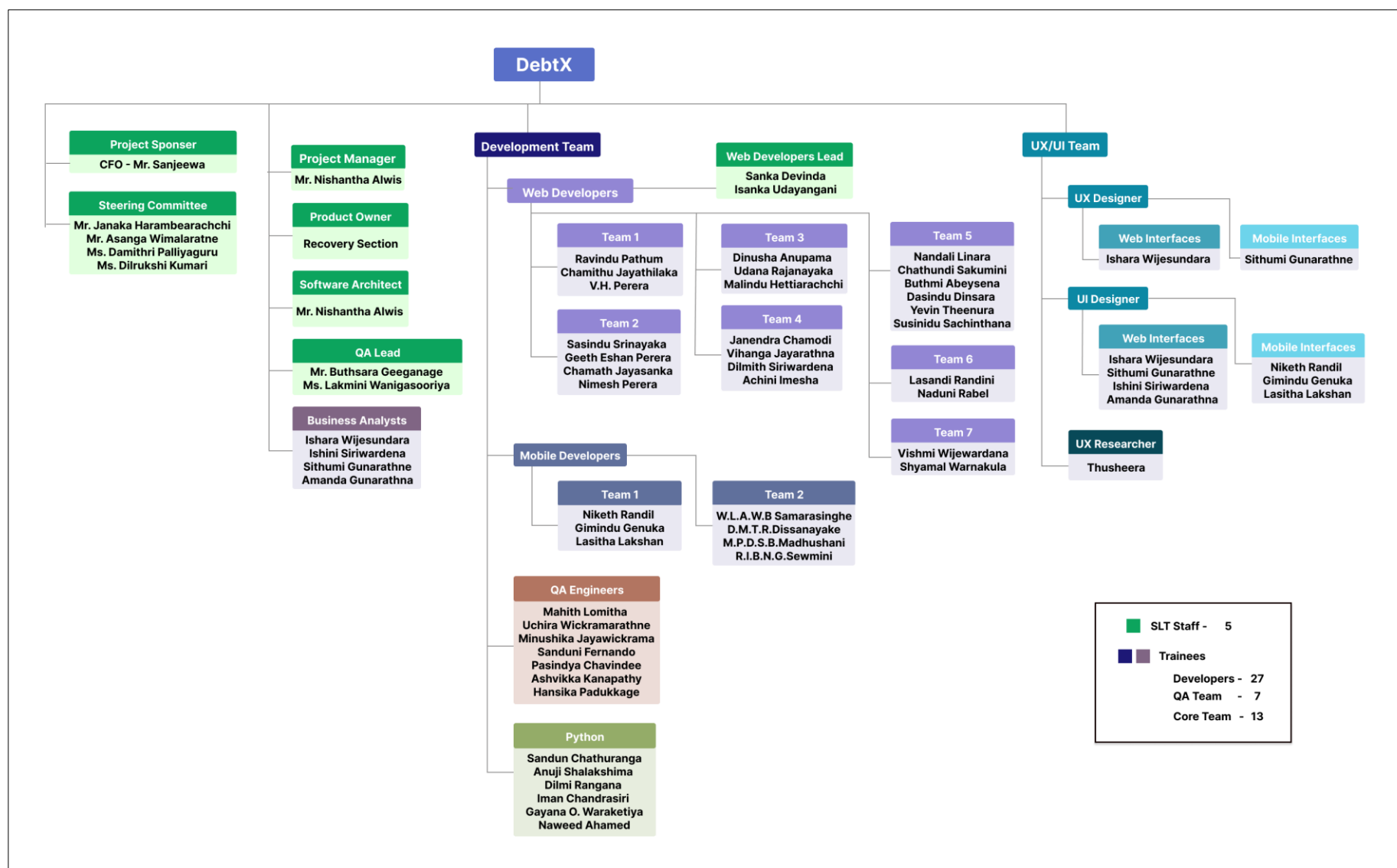
Figure 1: Team Structure

2. Project Overview

2.1. Background

The existing process for debt recovery in the Recovery Section of SLT is entirely manual. Data for collecting arrears and customer-provided equipment (CPE) is manually retrieved from internal datasets maintained in systems such as BSS, OSS, and CRM. The Recovery Section officers at SLT manage this process in collaboration with Debt Recovery Companies (DRCs) and Recovery Officers (ROs).

The process begins with the SLT officer collecting input in the form of the customer's account number and specifying the required action, which may be one of the following:

- Collect arrears
- Collect CPE only
- Collect arrears and CPE

Based on the action entered relevant details are provided from the BSS, OSS, and CRM systems. The case is then handed over to the ROs through the DRCs. Cases are categorized based on the arrears amount and processed accordingly:

- Cases meeting specific criteria are directed to the negotiation process (arrears and CPE).
- Cases qualifying for immediate legal action are sent directly to the Letters of Demand (LOD) process.
- Cases that do not meet any criteria are closed.

A negotiating procedure is started with the customer, and the relevant information is sent to the RO if the action entails picking up the CPE unit. Unless the CPE collection is unsuccessful, the case is considered successful after the unit is gathered and approved by the RCMP. The discussion phase occurs between the RO and the client if the action entails collecting arrears. After successful talks, the settlement procedure begins, during which the RO's commissions are determined by the amount of money obtained. The matter is sent to the mediation board for additional settlement if talks are unsuccessful. Depending on the customer's reaction, cases may go through the LOD procedure or a dispute resolution path. After meeting certain requirements, cases sent to the LOD procedure proceed to the litigation phase.

Significant issues with the existing manual technique include data redundancy, inefficiency, and the possibility of human mistakes. In order to handle client accounts, Recovery Section officers mostly rely on manual involvement, retrieving inputs from systems such as CRM, BSS, and OSS. This leads to a laborious process that is prone to errors and delays, underscoring the necessity of automation. The BSS will update the segment to 100 when the case is terminated after receiving the cases with the "pending write-off" status, and the updated cases will be displayed in the write-off log.

2.2. Objectives

- **Optimize Recovery Operations**

  Enable Recovery Officers (ROs) to update case negotiations through a mobile portal in real time, increasing process transparency and reducing delays. And also, improve the efficiency of arrears and equipment recovery.

- **Enhance Monitoring Capabilities**

  SLT officers can monitor DRC, and RO activities through the system and they can provide necessary information and activities such as request mediation board letters, and extended periods.

- **Facilitate Legal and Mediation Board Activities**

  Streamline the escalation of unresolved cases to the mediation board and legal team. Automate the generation of final reminders and Letters of Demand (LOD) with digital or manual signatures.

- **Automate Commission Payments**

  Ensure accurate and timely calculation of commission payments to DRC based on successful recoveries.

- **Leverage Insights for Performance Optimization**

  Provide interactive dashboards and reports for SLT management to evaluate recovery activities, enabling data-driven decisions to improve operational strategies.

- **Enable Comprehensive Report Generation**

  Generate detailed reports to support operational and strategic needs, including:

  - ❖ Daily Payment Reports
  - ❖ LOD Collection Reports
  - ❖ BULK Report - Account Number
  - ❖ BULK Report - Case ID

2.3.   Assumptions and Constraints

Assumptions

1. **Stakeholder Adoption:** All stakeholders (SLT officers, DRCs, ROs) will adopt the DebtX system and use it as intended.

2. **Data Availability:** Existing data from BSS, OSS, and CRM systems is accurate, complete, and ready for integration.

3. **Infrastructure:** SLT's IT infrastructure will support smooth implementation and operation of the DebtX system.

4. **Training and Support:** All users will receive adequate training and ongoing support to effectively utilize the system.

5. **Compliance:** The system will meet all regulatory and legal requirements for debt recovery processes.

6. **Funding:** Adequate funding will be available for the development, implementation, and maintenance of the system.

7. **Security:** Robust security measures will be implemented to protect sensitive customer and financial data.

Constraints

1. **Timeline:** The project must meet the defined deadlines for design, development, testing, and deployment.

2. **Budget:** Costs must remain within the allocated project budget.

3. **Quality:** The system must meet quality benchmarks, ensuring reliability, scalability, and usability.

4. **Scope:** Feature development is limited to the agreed-upon requirements. Scope changes may delay implementation or increase costs.

5. **Team Experience:** The project team's limited technical expertise requires focused training and resource management.

3. Functional requirements

3.1. High-Level Requirements

Case Entry:
- Support bulk and individual case registration with a user-friendly interface.
- Automatically validate and link multiple products associated with a single customer account.

Data Flow and Integration:
- Automate data retrieval and synchronization from systems like BSS, OSS, CRM, and the Data Lake.
- Ensure real-time updates for case status and actions.

Legal Support:
- Generate compliant documents (e.g., LODs, Final Reminders) with digital or manual signature options.
- Escalations to mediation boards or legal teams based on predefined workflows.

Recovery Insights:
- Provide dashboards to monitor case progress and performance metrics.
- Generate detailed, filterable reports for stakeholders.

Negotiation Management:
- Allow ROs to update negotiation outcomes and track settlements in real time.
- Automate reminders for overdue cases and maintain logs for compliance.

Write-Off Management:
- Streamline workflows to manage, log, and report "pending write-off's and terminated cases.
- Integrate with BSS, and CRM to reflect accurate write-off statuses.

4.   Non-Functional Requirements

- **Performance**
  The system should handle 100 concurrent requests with a response time of less than 2 seconds, even during peak usage with up to 95% increased traffic.
- **Scalability**
  Support future growth in users, cases, and data sources without performance degradation.
- **Availability**
  Ensure 85% uptime for continuous access to all stakeholders.
- **Security**
  Implement AES-256 encryption and multi-factor authentication (MFA) to protect data, complying with industry standards for data privacy.
- **Usability**
  Provide an intuitive interface that minimizes training needs and supports multi-language functionality if required.
- **Maintainability**
  Use modular architecture to enable updates and upgrades with minimal downtime.
- **Compliance**
  Adhere to legal and regulatory standards, ensuring generated documents meet compliance requirements.
- **Reliability**
  Prevent data loss with automated backups and recovery mechanisms while maintaining data integrity.
- **Compatibility**
  Integrate seamlessly with existing systems like BSS, OSS, CRM, and commonly used devices and browsers.
- **Auditability**
  Maintain a detailed log of all system activities for accountability and compliance.
- **Extensibility**
  Allow future enhancements, such as integrating new tools or workflows, without major reengineering.
- **Accessibility**
  Ensure compliance with accessibility standards.
- **Response Time**
  Maintain a consistent response time of under 2 seconds for standard operations.
- **System Visibility**
  Provide stakeholders with role-based access to real-time system status, activity logs, and case progress via dashboards and notifications.

5. System Requirements

5.1. Hardware Requirements (Servers, Storage)

1. **Servers**
   - **Application Server:**
     A high-performance server is required to host the application and manage user requests efficiently.

   - **Database Server:**
     A dedicated server to store and manage sensitive customer and financial data securely.

2. **Storage Devices**
   - **Centralized Storage**:
     A Network Attached Storage (NAS) or Storage Area Network (SAN) device for handling large volumes of data, logs, and archives.

3. **Network Equipment**
   - **Routers and Switches:**
     Enterprise-grade routers and Layer-3 switches for efficient data transmission and low latency.

   - **Firewalls:**
     Next-generation firewalls to ensure secure communication and protect against cyber threats.

4. **Workstations**
   - **Employee Workstations**:
     Systems for staff handling debt recovery operations, reporting, and customer interactions.

5. **Backup Systems**
   - **Data Backup Servers:**
     Dedicated backup hardware for regular data backups to prevent loss during hardware failures or cyberattacks.

6. **Power Supply and UPS**
   - **Power Backup Systems:**
     Uninterruptible Power Supply (UPS) units for critical hardware to ensure continuous operations during power outages.

7. **Additional Requirements**
   - **Cooling Systems:**
     Proper air-conditioning systems to maintain optimal operating temperatures for hardware in server rooms.

   - **Rack and Mounting Equipment**:
     Standard server racks with cable management systems for efficient organization.

5.2. Software Requirements (OS, DB, Framework)

1. **Operating System (OS) Requirements**

   Development Environment (For Developers' Workstations):
   - Windows 10/11
   - macOS (for Mac users)

2. **Technology Stack**

   Frontend:
   - React.js (for a dynamic and responsive UI)
   - Redux (for state management)
   - Tailwind CSS (for styling and UI components)

   Backend:
   - Node.js with Express.js (for server-side logic and APIs)
   - Python (for RabbitMQ message queue processing)

   Database:
   - MongoDB (NoSQL database for structured data storage)
   - Firebase Firestore (for real-time data updates and cloud storage)

   Message Queue
   - RabbitMQ (for asynchronous communication between microservices using Python)

3. **Development Tools and Frameworks**
   - Version Control: GitHub/Bitbucket for source code management
   - Code Editor: VS Code
   - Package Manager: npm
   - API Testing: Swagger/Postman

4. **Deployment & Hosting**

   Database Hosting:
   - MongoDB Atlas
   - Firebase Firestore

   CI/CD Pipeline:
   - For automated deployments

5. **Security & Authentication**

   Authentication & Authorization:
   - Firebase Authentication (for user login and access control)
   - JSON Web Tokens (JWT) (for secure API authentication)
   - Role-Based Access Control (RBAC) (for managing user permissions)

6. Monitoring & Logging

Error Logging & Monitoring:
- Firebase Analytics (for application usage monitoring)
- LogRocket / Sentry (for error tracking and debugging)
- Prometheus & Grafana (for performance monitoring)

6.   Use Cases

Use Case ID	Use Case Name
UC011	Collect incidents from the Data Lake
UC012	Register Incidents
UC013	Filter 1
UC014	Collect only CPE
UC015	CPE Collection Process
UC016	Assign DRC
UC017	Manger Approval
UC019	Monitor DRC and Re-Assign
UC020	Distribute among RO
UC021	Monitor RO and Re-Assign
UC022	Customer Negotiation
UC023	Request Action
UC024	Mediation Board Selection
UC025	Mediation Board Process
UC027	Create Settlement Plan - SLT
UC028	Create Settlement Plan-RO
UC029	Settlement Process
UC030	Write Off
UC031	FTL LOD Process
UC032	Litigation Process
UC033	WRIT
UC034	Re-WRIT
UC035	F2
UC036	Final Reminder
UC037	LOD
UC038	Dispute

7. Acceptance Criteria

1. **Case Management**
   - SLT Staff could create individual cases or bulk cases without system errors.
   - Multiple products linked to a customer account are grouped under a single case.
   - Cases should be validated (e.g., required fields, data accuracy) before submission.
   - System distributes open cases to appropriate DRCs based on SLT user's preference.

2. **Data Integration**
   - The system retrieves arrears data from BSS, OSS, CRM, and Data Lake automatically.
   - Updates made in the legacy systems are reflected in DebtX in real time.
   - No data duplication or no error occurs during data retrieval.

3. **Notifications and Alerts**
   - Real-time alerts are triggered for overdue cases, escalations, and status changes.
   - Users receive notifications via the system dashboard, SMS, or email, based on configured preferences.
   - Notifications are logged in the system with timestamps for audit purposes.

4. **Document Automation**
   - The system generates Final Reminders, Letters of Demand (LOD), and other legal documents using predefined templates.
   - Digital signatures can be applied to the documents without errors.
   - Final Reminders, LODs and other legal documents comply with legal and organizational standards.

5. **Negotiation and Settlement**
   - Recovery Officers (ROs) can update negotiation outcomes in real-time via the mobile app.
   - The system tracks settlements, updates case statuses, and confirms payments accurately.
   - Automated reminders are sent to ROs for overdue cases or pending follow-ups.
   - All negotiation logs and updates are maintained for future reference and compliance.

6. **Write-Off Management**
   - Cases marked as "pending write-off" are processed and transitioned to "write-off" status based on predefined rules.
   - Write-off logs contain detailed case information, including date and reasons for write-off.
   - Users can generate accurate and detailed reports of write-off cases for compliance and auditing.

7. **Dashboards and Reporting**
   - Dashboards display real-time case progress, and DRC/RO performance.
   - Reports can be filtered.
   - All generated reports are accurate, downloadable, and adhere to the client's reporting requirements.

8. Glossary

DRC	Debt Recovery Company
RO	Recovery Officer
CPE	Customer Product Equipment
LOD	Letter Of Demand
RCMP	Return CPE Management Portal
BSS	Billing Support System
OSS	Operating Support System
CRM	Customer Relationship Management
SMS	Short Message Service
UAT	User Acceptance Test
IT	Information Technology
CSS -	Cascading Style Sheets
UI -	User Interface
NoSQL -	Not Only Structured Query Language
JWT -	Json Web Token
npm -	Node Package Manager
OS -	Operating System
DB -	Database
CI/CD pipeline -	Continuous Integration and Continuous Deployment Pipeline

9. Appendices

9.1. System Architecture
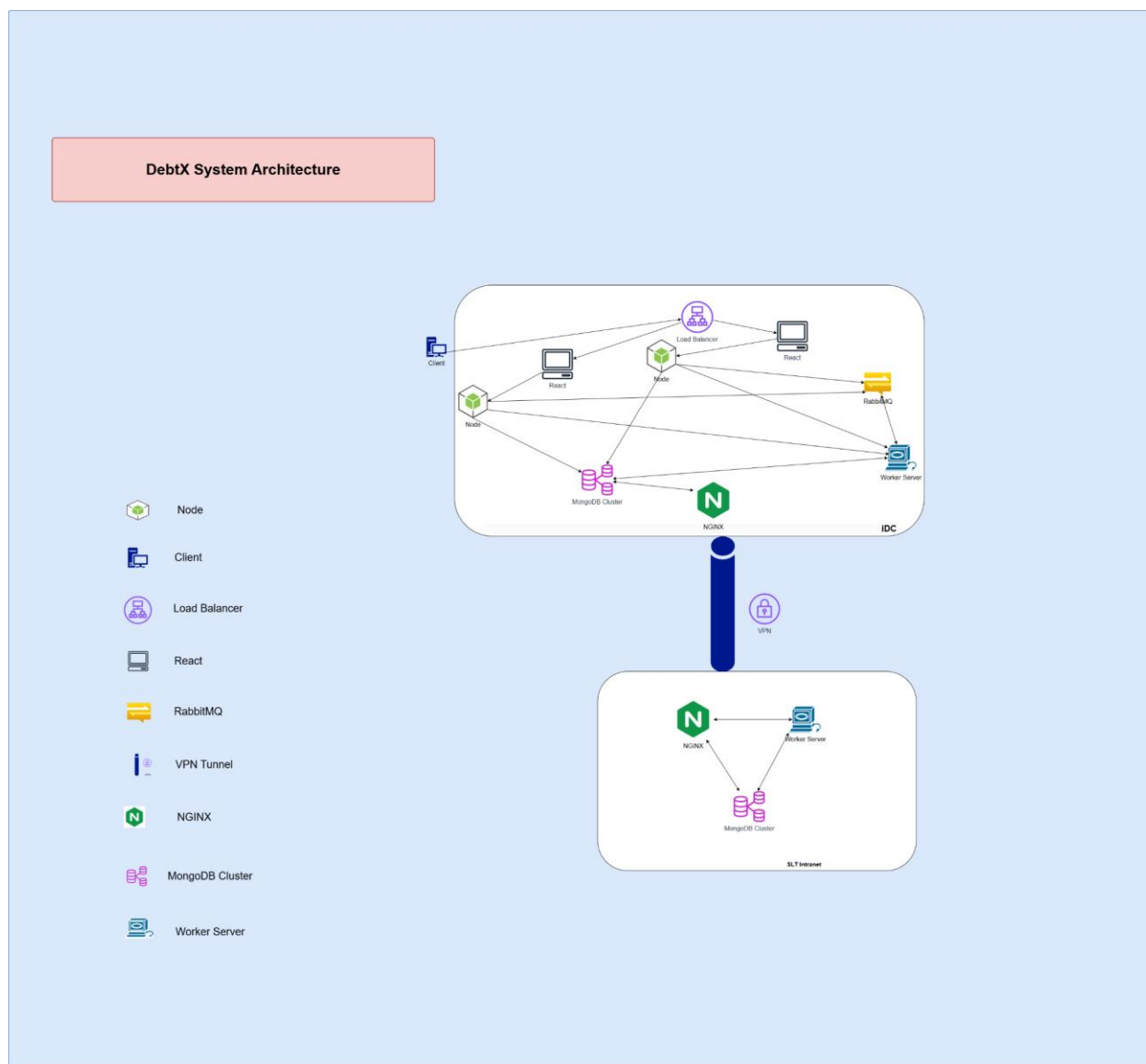
Figure 2: System Structure

9.2.   Main Diagram
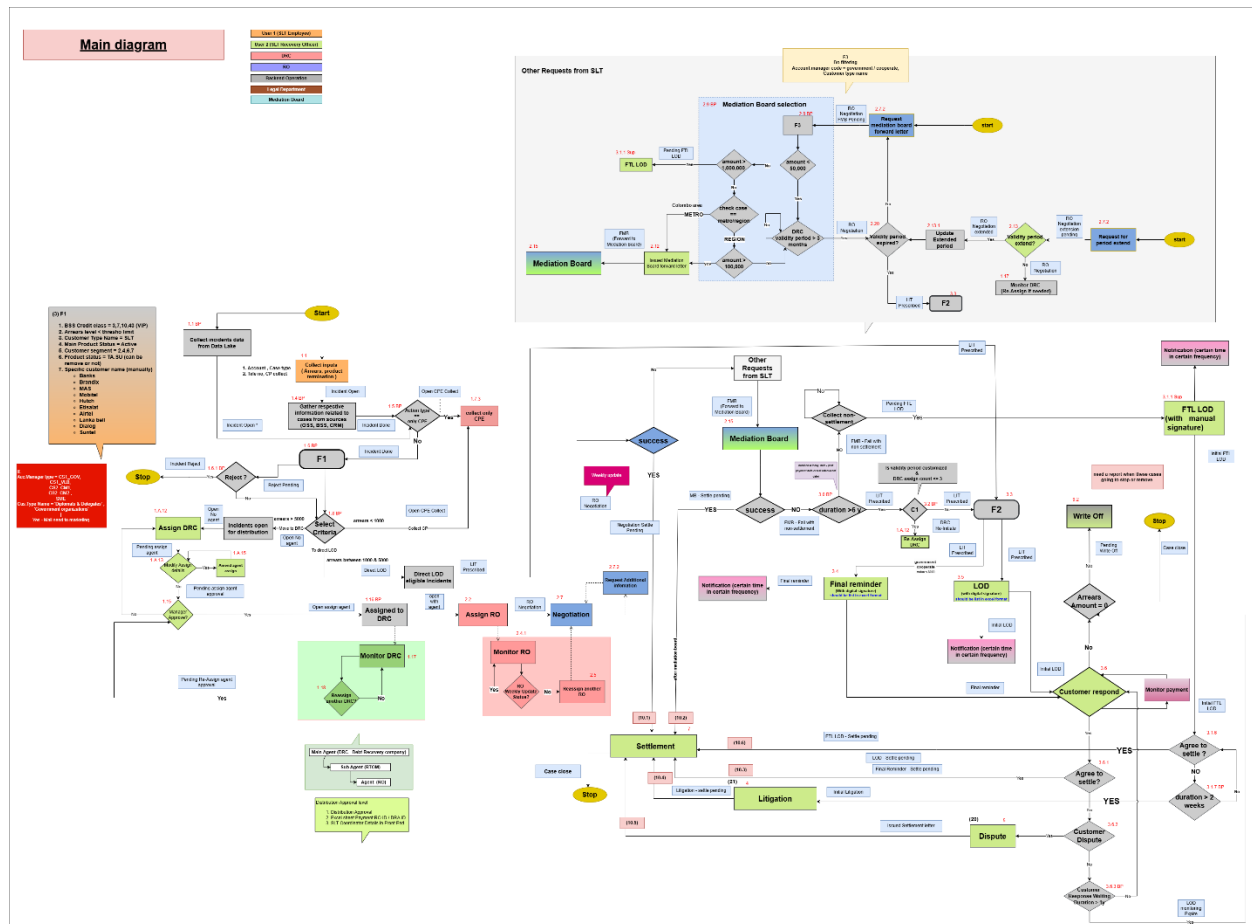
Figure 3: Main Diagram

Figure 4 : CP Collecting
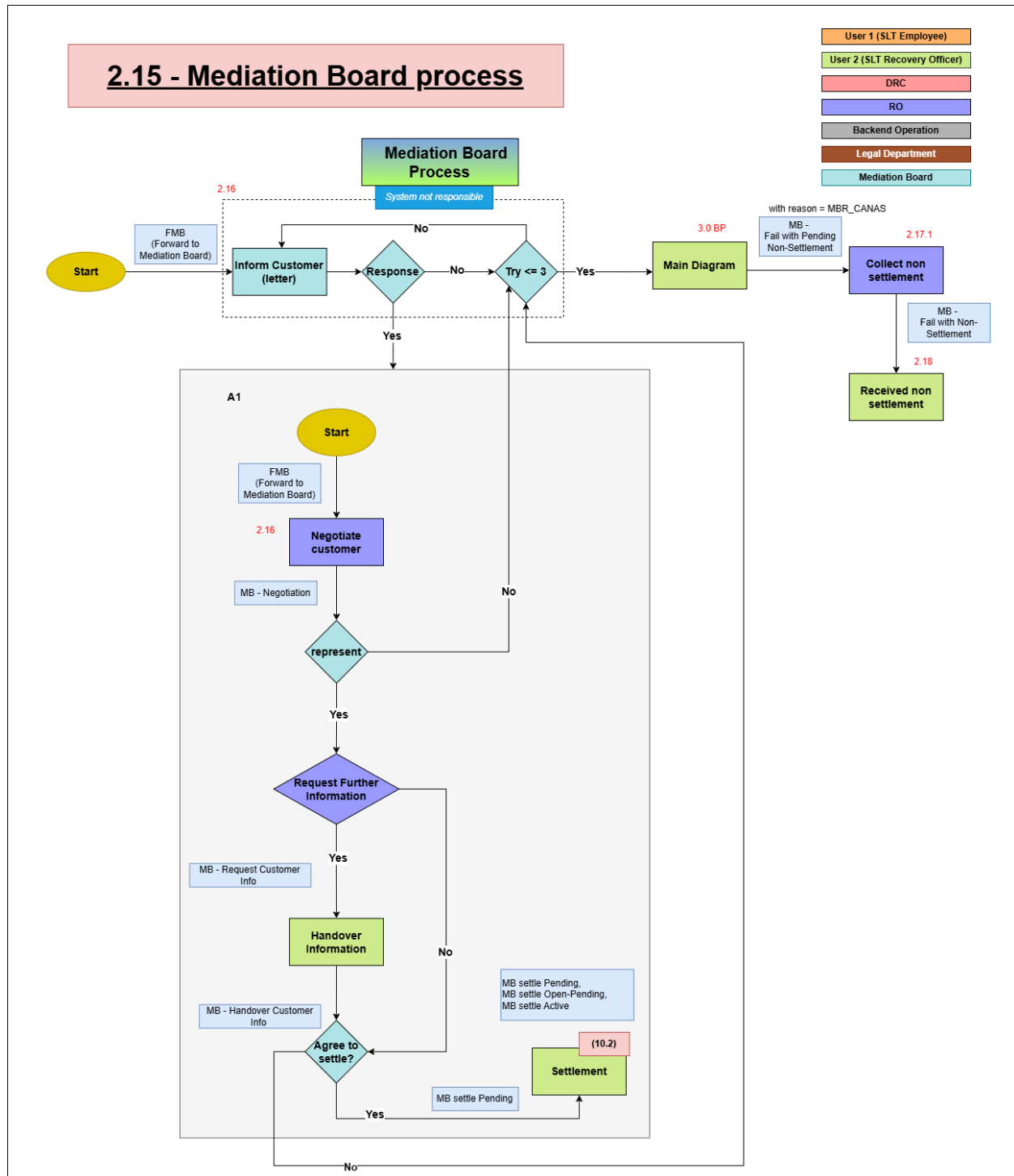
Figure 5: Mediation Board
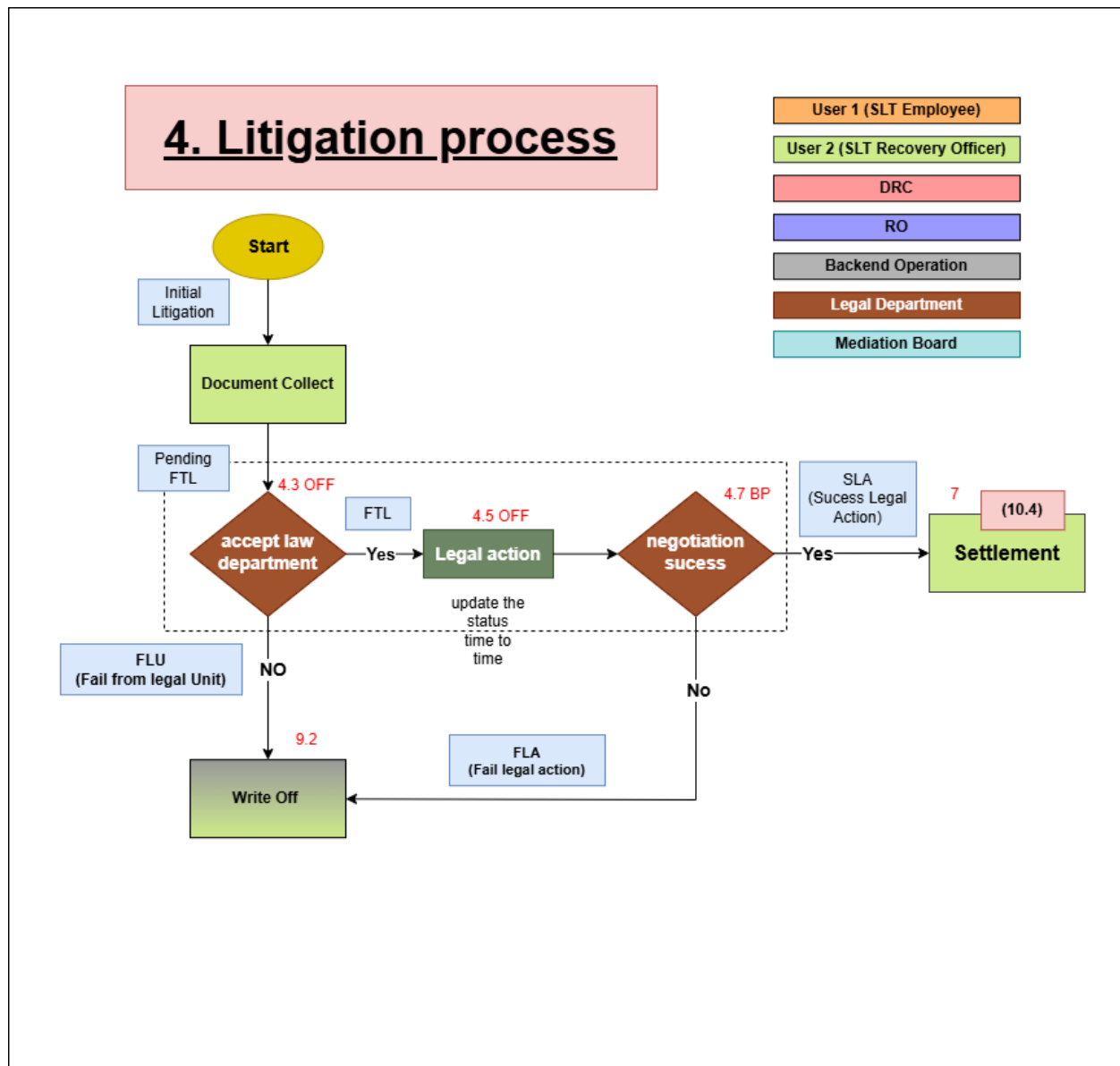
Figure 6: Litigation Process
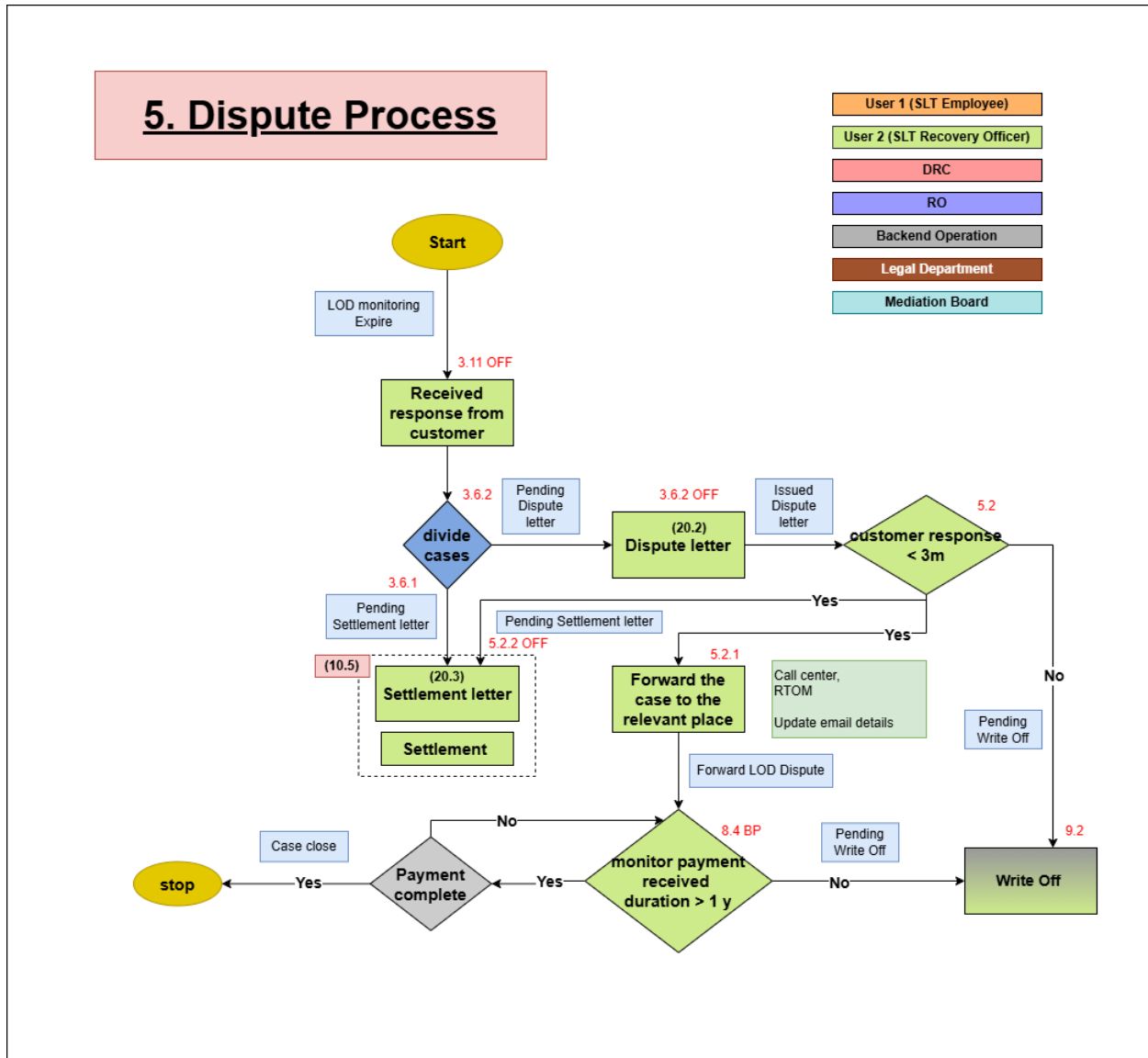
Figure 7: Dispute Process

Figure 8: Settlement Process
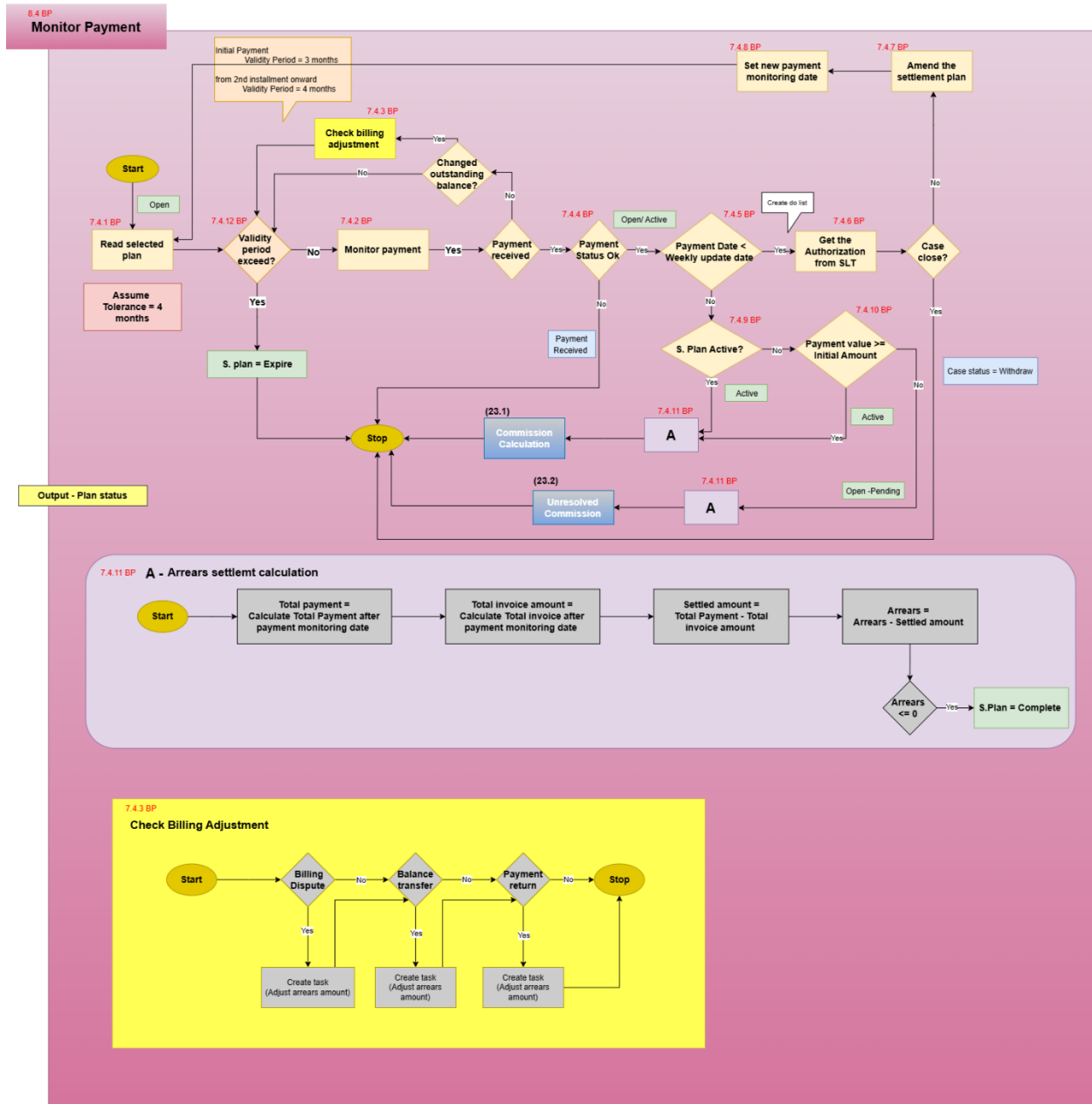
Figure 9: Settlement- Monitor Payment

9. Write Off

Start

Send case to CAM

Change segment to 100

Write off the case

Stop

User 1 (SLT Employee)	
User 2 (SLT Recovery Officer)	
DRC	
RO	
Backend Operation	
Legal Department	
System	
Mediation Board	
CAM	
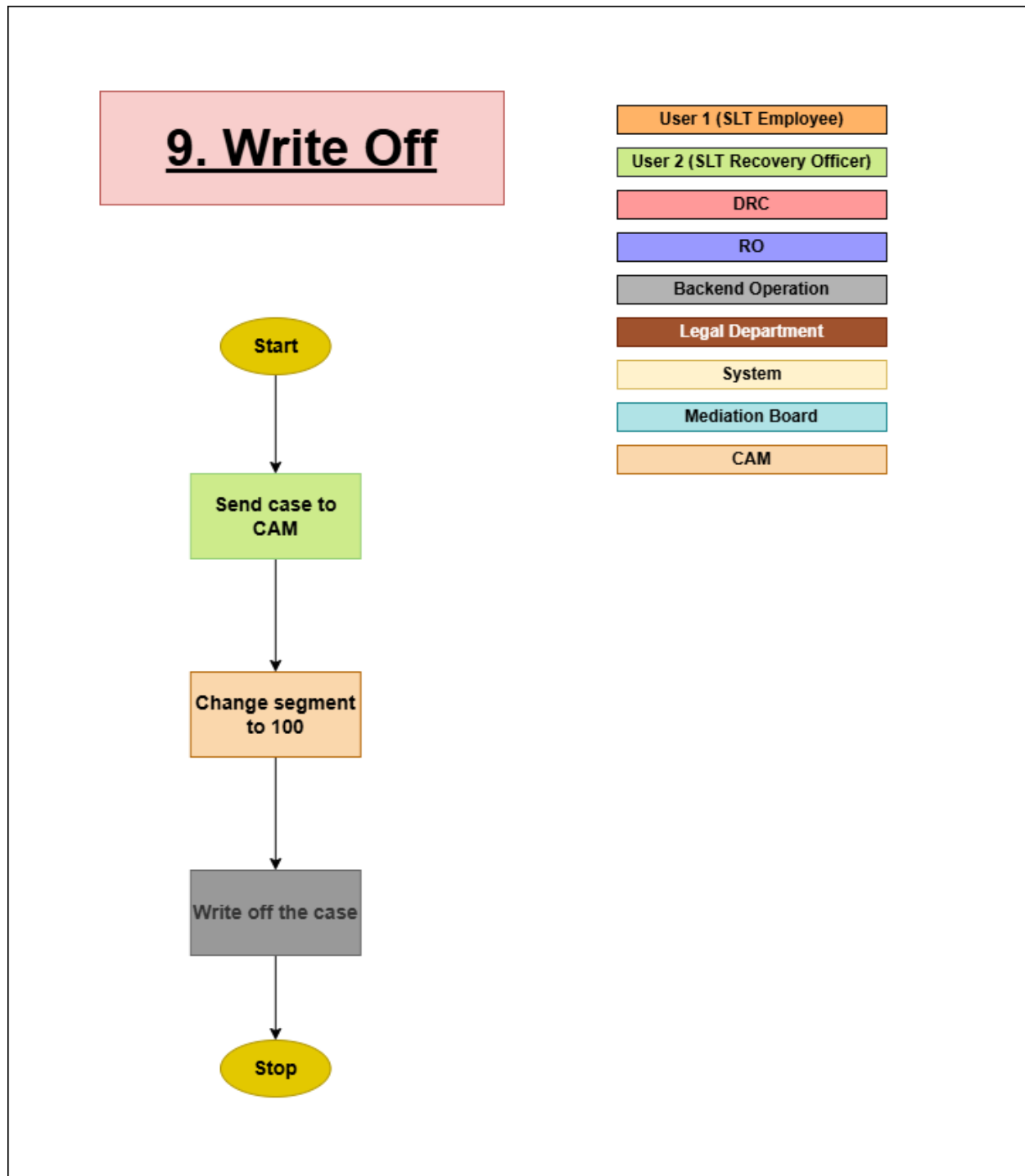
Figure 10: Write Off

9.3. Data Flow Diagram
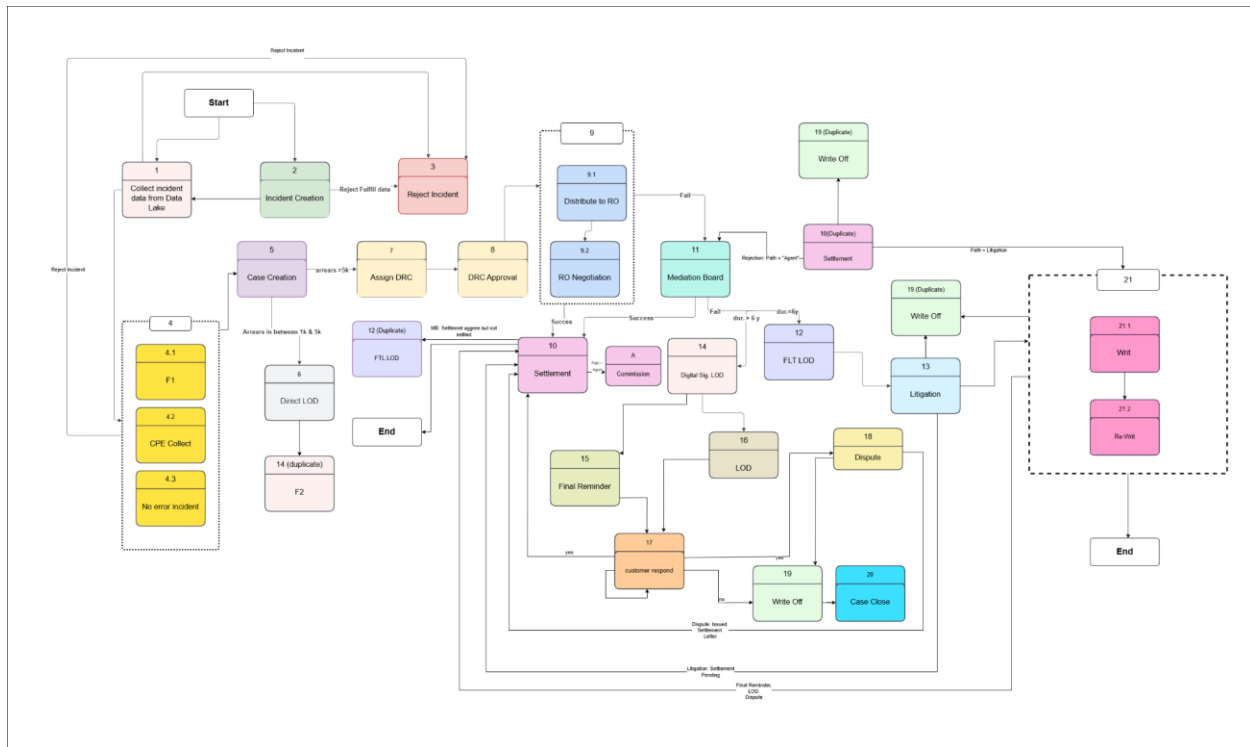
Figure 11: Data Flow Diagram

9.4. Use Cases

Use case ID	UC011
Use case name	Collect incidents from Data Lake
Process ID	*1.1 BP*
Actors	DebtX (Debt Recovery System)
Description	Collect terminated account details from the data lake and register them as incidents.
Pre-conditions	Details relevant to the terminated accounts should be collected from OPMC (account-related information) and BSS (last payment details).
Post-conditions	Incidents are registered to the system successfully.
Back-end/Front-end	Back-end (API Calling)
Pre status	-
Post status	*Incident_Open*
Message of status	Incidents successfully created.
Notification	SLT Staff: created incident details (incident count, created dtm)

	Action	System Response
Success path	Call API	Collect relevant data from the data lake and process. Load them into the DebtX. Update the incident list
Alternate path		

Use case ID	UC012
Use case name	Register Incident
Process ID	*1.1 & 1.4 BP*
Actors	DebtX (Debt Recovery System) SLT Staff
Description	- Incident input collection for the system can be done in the following ways: - Bulk upload - Manually input - Data includes - Account no, Telephone No, and Action type as Arrears collect or Arrears + CPE collect. - Telephone number/Service number (System ID) and action type as Only CPE collect. - The source type should be mentioned as - Pilot - Suspended - Product Terminate - Special - Once the data input is done, the relevant details related to the accounts will be collected from the OSS, BSS, and CRM. - After collecting necessary details from the sources the incident list will be updated.
Pre-conditions	- The user should be a registered user. - Authorised users should have the necessary privileges. - The system should be able to upload the cases in bulk as an Excel file.
Post-conditions	- Details added to the incident list.
Back-end/front-end	Front end: Bulk upload or Manual input
Pre status	*Incident_Open*
Post status	*Incident_Done*
Message of status	Necessary Error message with error status Success message: "Incident successfully registered."
Notification	SLT Staff - Registered incident count
	Action	**System Response**

Success path	If Select Register type as Bulk Upload:	
	Select relevant excel file, Select the action type and upload	
		Uploaded cases will be added to the Incident Upload list with "Open" status.
		Once the backend process of collecting further details of the uploaded accounts from the sources: OSS, BSS, and CRM
		is completed, status will change to "Done."
	If Select Register type as Individual:	
	Following fields should be filled:	
	● Account No ● Action type (Arrears Collect/ Arrears + CPE collect/ CPE Collect) ● Telephone No (If the Selected 'Action Type = Only CPE') ● Source Type ● Calendar Months (Assigning duration)	

		Registered cases will be added to the Incident list with "Open" status. Once the backend process of collecting further details of the uploaded accounts from the sources: OSS, BSS, and CRM is completed, status will change to "Done."
Alternate path		

Use case ID	UC013
Use case name	Filtering process 01 and Select Criteria
Process ID	*1.6BP & 1.8 BP*
Actors	DebtX (Debt Recovery System), SLT Staff
Description	- The process of filtering the gathered data from the sources for the accounts that are terminated. - The incidents that fall under the following criteria will be tagged as pending rejected. 1 - Credit class = VIP, 3, 7, 10, 43 2 - Arrears level < threshold limit 3 - Customer type name = SLT 4 - Main product status = Active 5 - Product status = TA, SU 6 - Specific customer name (manually) Banks Brandix MAS Mobitel Hutch Etisalat Airtel Lanka Bell Dialog Suntel 7 - Customer segment = 2, 4, 6, 7 - The incidents which do not meet the criteria will be go through the below conditions and divided into 3 process paths. - Condition 1: if the arrears amount > 5,000: the incidents will be moved to the Assign DRC (Debt Recovery Company) list - Condition 2: If the arrears amount is < 1,000: the incidents will be moved to the Collect CPE process. - Condition 3: If the arrears amount is between 1,000 & 5,000: incidents will move to the Direct LOD process.

Pre-conditions	• Data from the data lake is fetched successfully. • The respective data for the inputs should be collected. • Action type = 'only CPE' incidents should be omitted and added to the CPE collect list.
Post-conditions	1. Incidents fulfilling the F1 are added to the reject pending list. 2. Based on the conditions the incidents should be divided for the relevant processes.
Back-end/front-end	Back-end : Filter according to the filtering criteria add filter reason
Pre status	*Incident Done*
Post status	Reject Incidents—*Reject_Pending* Condition 01—*Open_No_Agent* Condition 02—*Open_CPE_Collect* Condition 03—*Direct_LOD*
Message of status	-
Notification	SLT Sta Document with relevant details of the cases where marketing concerns should be sent.

	Action	**System Response**
Success path	Incidents which are fulfilling the F1 criteria	Add incident to the Reject Pending list along with the filtered reason
	Incidents which are not fulfilling the F1 criteria	
	If the arrears < 1000	Add incident to 'Collect CPE' list
	If the arrears > 1000 and < 5000	Add incident to 'Direct LOD' list
	If Arrears > 5000	

		Add incident to 'Assign DRC' list
	Account manager type : CS1_GOV CS1_VLB CS2_CM1 CS2_CM2 SME and Customer Type Name: Diplomats & Delegates Government organizations	
		Create a list and send to the marketing team for marketing concerns
Alternate path		

Use case ID	UC014
Use case name	Collect only CPE
Process ID	*1.5 BP & 1.7.3*
Actors	DebtX (Debt Recovery System)

Description	The system automatically forwards incidents, which is the
	
	  ○ Action type = 'Collects only CPE'
	
	  ○ Action type = 'Arrears + CPE Collect' where the Arrears amount < 1000
	
	to the 'Collect only CPE Log.'

Pre-conditions	- Action type = 'Collect only CPE' - Action type = 'Arrears + CPE Collect' and the Arrears amount < 1000
Post-conditions	- Incidents are added to the 'Collect only CPE Log.'
Back-end / Front-end	Back-end
Pre status	Action type = 'Collect only CPE' - *Data_gathered* Action type = 'Arrears + CPE Collect' and the Arrears amount < 1000 - *Case_Pending*
Post status	*Case_Open*
Message of status	
Notification	SLT staff - Collect only CPE count

	Action	System Response
Success path	If Action type = 'Collect only CPE'	Update the status and the CPE-only Log

	Else, Action type = 'Arrears + CPE Collect' and the Arrears amount < 1000	Update the status and the CPE-only Log
Alternate path		

Use case ID	UC015
Use case name	CPE Collection Process
Process ID	*1.10 BP & 1.12 BP & 1.11 BP & 2.7 & 2.18 & 8*
Actors	DebtX (Debt Recovery System), Recovery Officer (RO)
Description	After checking the details of the equipment related to the case, the case is assigned to the DRC to collect the equipment.
	DRC assigns relevant RO to collect the equipment from the user.
	RO collects equipment from customers after the negotiation process is successful and handover them to the RCMP.
	According to the RCMP status DRC will get the commission..
Pre-conditions	Cases are already in the Only CPE Collect log.
Post-conditions	- CPE handed over to RCMP
	- Case Close
Back-end / Front-end	Front-end: Negotiation updates and further details
	Back–end: RCMP process and Commission calculation
Pre status	*Open_CPE_Collect*
Status	*Open_No_Agent*
	DRC_Pending_Approval
	Open_assign_Agent
	Open_With_Agent
	Equipment_Collected
	RO_Negotiation
	Handed_Over_RCMP

	Reject_RCMP	
	RCMP_Confirmed	
Post status	*Case_Close*	
	Collect_CPE_Fail	
Message of status	-	
Notification	-	
	Action	**System Response**
Success path	If SLT owned unit	
	If Product status != TX	
		Case is closed
	Else If Shall collect customer unit	
	If Product status != TX	
		Case is closed
	Else	
		Change case Status = "*Open_No_Agent*"
	Assign DRC and Send to approval	
	Get the approval for the DRC assignment and	
	Assigning ROs	Distribute cases among DRCs
		Update status = '*Open_With_Agent*t'
	If negotiation is successful	Monitor negotiation updates by RO
	Collect Equipment	
	Submit to RCMP	

	If Negotiation is failed	Update RCMP status If RCMP status = Success 　　Calculate the commission If RCMP status = Reject 　　Update case status as "*Case_Close*" Update Status as "*Collect_CPE_Fail*"
Alternate path		

Use case ID	UC016
Use case name	Assign DRC
Process ID	*1.A.12 & 1. C.12 & 1.A.13 & 1.A.15*
Actors	SLT staff
Description	Assign cases to DRC to take action on: → Arrears Collect → Arrears + CPE Collect → CPE Collect
Pre-conditions	Incidents should be displayed in the open incidents list.
Post-conditions	Distribute DRC-assigned case lists to DRCs.
Back-end/front-end	Front – end
Pre status	*Open_No_Agent*
Post status	*DRC_Pending_Approval*
Message of status	Confirmation messages Relevant messages for case assigning actions
Notification	-

	Action	System Response
Success path	Select incidents in the open incidents list and proceed with them. Select and Open a service type Do the assigning Process	Register incidents as cases Display cases count according to the service type.

	Select Arrears brand	
	Select DRC	
	Enter case count	
	Click on 'Add'	Display added details in the table
	Edit or Delete the added records	
	Repeat the process until	
	Total case count (in the table) == Case count	
	Proceed the entered details	If Total case count (in the table) != Case count
		Display Error Message
	Do the assigning Process (Again)	
		Else
		Display the assigned summary
		Do the distribution process
		Create a batch with the cases and add them to the Case distribution DRC Transaction list.
	Allow users to open the batch and see how the distribution	

	has happened through the system.
	
	If user need to change the case count of a DRC
	
	    Select relevant batch and Amend the case count
	
	Else
	    Send the batch to the Manager Approval
		Allow Users to amend the added DRC case count if necessary before sending for the approval process.
		
		Update the case count
		
		Change the case status in the batch list.
		
		Add a batch to the DRC Assign approval list.

Alternate path		

Use case ID	UC017
Use case name	Manager Approvals
Process ID	*1.15*
Actors	SLT staff - Manager
Description	Manager can approve the relevant approvals in the approval list for the further processes.
Pre-conditions	Pending approvals should be in the Approvals list
Post-conditions	Cases have been added to relevant lists for further process.
Back-end/front-end	Front – end
Pre status	DRC Assign approval - *Open_No_Agent* DRC Re-Assign approval - *Pending Re-Assign Agent Approval* Case Withdrawal approval - *Pending case withdrawal* Case Abandoned approval - *Pending case Abandon* Case Write-Off approval - *Case Write-Off approval* DRC Assign approval - *Pending DRC Commission approval*
Post status	DRC Assign approval - *Open_Assign_Agent* DRC Re-Assign approval - *Open_Assign_Agent* Case Withdrawal approval - *Case withdrawn* Case Abandoned approval -

	Case Abandoned	
	Case Write-Off approval -	
	PendingWrite-Off	
	DRC Assign approval -	
	Commissioned	
Message of status	Confirmation messages Relevant error messages	
Notification	-	
	Action	**System Response**
Success path	Check the Approval log Select a case or list of cases and Approve	Change case status Add to relevant lists DRC Assign approval - Assign relevant DRC and send to them DRC Re-Assign approval - Assign relevant DRC and send to them Case Withdrawal approval - Add to Withdraw log Case Abandoned approval - Add to Abandoned log Case Write-Off approval - Add to pending Write-Off log DRC Assign approval -

		Add commission to DRC
Alternate path		

Use case ID	UC019
Use case name	Monitor DRC and Re-Assign DRC
Process ID	*1.17 & 1.18*
Actors	SLT staff
Description	Monitor the assigned DRC. Re-assign the DRC if necessary based on the performance. Or, When the case fails from the mediation board and the duration criteria are also less than 6 years, the case moves to C1 decision. Where re-assigning DRC can be done if needed.
Pre-conditions	Cases have been successfully assigned and distributed to the DRC
Post-conditions	If Re-Assign DRC Change the DRC and Assign a new DRC. Update the assign DRC log If Withdraw Add case to Pending Withdraw case log
Back-end/front-end	Front – end
Pre status	*Open_Assign_Agent*
Status	*Open_With_Agent* *RO_Negitiation* *Negotiation_Settle Pending* *Negotiation_Settle Open-Pending* *Negotiation_Settle Active* *RO_Negitiation_Extended* *FMB* *MB_Negotiation* *MB_Settle Pending* *MB_Settle Open-Pending*
Post status	If Re-Assign DRC *DRC_Manager_Approval*

	If Withdraw *Pending_Withdrawal*	
Message of status	-	
Notification	-	
	Action	**System Response**
Success path	Select the DRC's case from the DRC List	Navigate to the DRC's Case list

	Check the Case Progress
	
	(Check the Case progress by the status of the case with the assigned date)
	
	If no progress
	
	    If Re-Assign DRC
		Check the DRC count <= 3 && Validity Period == Extended
		
		    If DRC count >= 3
		
		        Display Necessary error message
		
		    If total Validity period >= 5 months
		
		        Display Necessary message

		Else
		Navigate to the Re-Assign DRC page
	Select new DRC and submit	
		Send the case to the Manager for approval
	Else Withdraw Case	
		Add Case to Pending Withdrawal log and Send for approval
Alternate path		

Use case ID	UC020
Use case name	Distribute among Recovery Officer (RO)
Process ID	*2.2*
Actors	DRC (Debt Recovery Company)
Description	The DRC distributes assigned cases among the RO for further action. ● Customer details. ● The location of customers should be a concern.

Pre-conditions	- ROs are available in the customer's area.
	- Required customer details should be accessible.
	- Action categories,
	  ● Arrears collects
	  ● CPE collects
	  ● CPE + Arrears

Post-conditions	DRC distributes among relevant ROs. Details of the assigned ROs should be provided to the SLT and update the RO list.
Back-end/front-end	Front–end
Pre status	*Open_With_Agent*
Post status	*RO_Negotiation*
Message of status	"Case Assigned Successfully"
Notification	RO – Newly assigned cases count

	Action	System Response
Success path	Open "Pending" cases	Displays a list of cases.
	Select Cases and Select the relevant RO that cases should be Assigned and Submit	

		Assign cases among ROs based on availability. Notify RO about the Assigned case information Add RO assigned case list to the Ongoing case list
	Inform the assigned RO of details for the SLT.	
Alternate path		

Use case ID	UC021
Use case name	Monitor RO and Re-Assign RO
Process ID	*2.4.1 & 2.4.2 & 2.5*
Actors	DRC
Description	Check the case progress of RO's
Pre-conditions	Cases have been successfully distributed and assigned to the RO
Post-conditions	If Re-Assign RO Change the RO and Assigned a new RO
Back-end/front-end	Front – end
Pre status	*Open_with_Agent*
Status	*RO_Negitiation* *Negotiation_Settle Pending* *Negotiation_Settle Open-Pending* *Negotiation_Settle Active* *RO_Negitiation_Extended* *FMB* *MB_Negotiation* *MB_Settle Pending* *MB_Settle Open-Pending* *MB_Settle Active*
Post status	-
Message of status	-

Notification	If RO Re-Assigned
	
	        Previous RO – About the case termination
	        New RO – About the newly assigned case details

	Action	**System Response**

Success path	Navigate to the Assigned RO Case log	
	Select a case	
		Display Case details
		Arrears Collect
		● Last Negotiation details
		● Settlement Details
		● Payment details
		● Additional Request history
		CPE Collect
		● Last Negotiation details
	Check the Case Progress	
	If Re-Assign RO	
	Click on Re-Assign	
		Navigate to the RO Re-Assign page (Cases should be in the active validity period)
	Select new RO and submit	

		Change the RO's details of the case Notify the new assigned RO for the assigned case details
Alternate path		

Use case ID	UC022
Use case name	Customer Negotiation
Process ID	*2.7.1, 2.7.2, 2.7.3, 2.7.4*
Actors	Debt Recovery Company / Recovery Officer
Description	RO should visit the customer negotiate the case and take related actions, ● Collect Arrears ● Collect CPE ● Collect both CPE and Arrears And, update the customer feedback (refer list in the Table 1 - Negotiation selection items)
Pre-conditions	RO should receive the latest updated case details with the relevant customer details.
Post-conditions	- RO has updated the negotiation details - If the customer agrees to settle, settlement details should be updated. According to the payments done by the customer payment details should be updated
Back-end/front-end	Front–end - Assigned Case List Customer Negotiation Form
Pre status	*Open_With_Agent*
Status	*RO_Negotiation* *RO_Negotiation_FMB_Pending* *RO_Negotiation_Settle_Pending* *RO_Negotiation_Settle_Open-Pending* *RO_Negotiation_Settle_Active* *RO_Negotiation_extension_pending* *RO_Negotiation_extended*
Post status	*FMB* *Pending Withdraw* *Case Close*
Message of status	Confirmation messages for each submission.
Notification	DRC, RO : -

	Action	System Response
	Alert and email to Request Mediation Board letter if settlement plan != Active in one month after the case assigned.	

Success path	Open received case list
	
	Select a case
	
	Call or Visit to Discuss with the customer
	
	If customer details should change
	
	   Select the "Edit" option in the relevant case
	
	   Enter new customer contact details
	
	     (Contact No/ NIC/ Email/ Address)
	
	   Submit details
		Display Case details including customer details
		
		Add new customer details to the case and show latest details in customer informations Store previous details in database

	Else	

	Select the "Negotiation" option of the relevant case	
	Update customer response	Update Settlement details of the case
	If Negotiation == Success & Customer Agree to settle	
		Update negotiation details
	Create settlement plan	
	If Negotiation == Success & Customer still not Agree to settle	Update negotiation details
	Enter field status and Submit	
	If Negotiation != Success	Requests go through the Mediation Board selection process.
	Select Field Reason from dropdown, add Remark and submit	Add requests to the SLT's request log
	If any additional requests need to be done. Select the request type on the request dropdown and Submit	Add requests to the SLT's request log

	If Request = Mediation board forward letter	Add requests to the SLT's request log
		Add requests to the SLT's request log
	If Request = Period Extension	
	If Request = Additional customer information	
	If Request = Service Activation	
	—-------------------------------------- If SLT has respond for requests	

	If Mediation Board letter issued	
	Continue case with mediation board	
	Else	
	Re-negotiate with customer	
	If Period Extended	
	Continue negotiation with customer	
	If Additional information received	
	Provide details to customer and Continue negotiation	
Alternate path		

Abbreviation	Description	About Commission
AS	Agree to settle	Success
CA	Customer available	Pending
CANAS	Customer Available Not Agree to Settle	Fail
CD	Customer Dead	Fail
CGA	Customer Gone Abroad	Fail
FP	Fully paid	Success
MSG	Message	
NIC	No Information Customer	Fail
V_APAID	Visit already paid	Success
V_AS	Visit Agree to Settle	Success
V_CA	Visit Customer Available	Success
V_CANAS	Visit Customer Available Not Agree to Settle	Fail
V_CD	Visit Customer Dead	Fail
V_CGA	Visit Customer Gone Abroad	Fail
V_NIC	Visit No Information Customer	Fail
UA	User Available	Success
UANAS	User Available Not Agree to Settle	Fail
V_UA	Visit User Available	Success
V_UANAS	Visit User Available Not Agree to Settle	Fail
CALF	Calling failed	Fail
APAID	Already Paid	Success
REN	Rental Only	

RO Status Update - Negotiation

	Visited	Calling	Field Reason	Fail Reason	Commission Entitiled	Next forward	
Agreed To Settle	V_AS	AS	X		X	FMB - CANAS	# no payment update
Customer Available Not Agreed To Settle	V_CANAS	CANAS	X	X	X	FMB - CANAS	
Customer Available	V_CA	CA	X		X	FMB - CANAS	
Customer Gone Abroad	V_CGA	CGA	X	X	X	LIT_Prescribed	
No Information Of Customer	V_NIC	NIC	X	X		FMB - NIC	
Customer Dead	V_CD	CD	X	X	X	LIT_Prescribed	
User Available	V_UA	UA	X		X	FMB - CANAS	
User Available Not Agreed To Settle	V_UANAS	UANAS	X	X	X	FMB - CANAS	
Message		MSG	X		X	FMB - CANAS	
Fully Paid		FP	X		X	Create Notification for SLT Staff	check with the CAM
Calling Failed		CALF	X			FMB - CANAS	
Already Paid	V_APAID	APAID	X		X	Create Notification for SLT Staff	check with the CAM
Debt Collector Visit	V_DC	DC	X		X	FMB - CANAS	
Rental Only		REN		X		Create Notification for SLT Staff	check with the CAM

RO Status Update - Mediation Board

	Visited	Calling	Field Reason	Fail Reason	Commission Entitiled	Next forward	
Mediation Board User Not Agree To Settle		MBR_UNAS		X			
Installment Default		ID		X			

DRC/RO task with SLT - Negotiation level

Task	
Mediation board forward request letter	DRC, RO
Settlement plan	DRC, RO
Request period extend	DRC
Request customer further information	RO
Handed over Non-Settlement letter	RO
Customer request service	RO

DRC/RO task with SLT - Mediation Board level

Task	
Settlement plan	DRC, RO
Request period extend	DRC
Request customer further information	RO
Handed over Non-Settlement letter	RO
Customer request service	RO

Figure 12: RO Status Update

Functional Requirement Document

User case ID	UC023
Use case name	Request Actions
Process ID	*2.12, 2.13, 2.13.1,*
Actors	SLT staff
Description	Requests from RO are shown in the Request log. SLT staff can accept or deny requests. Request Types, ● Request additional information. ● Mediation board forward letter ● Request Period extension ● Request Settlement Plan ● Customer request Service
Pre-conditions	- RO Requests from Request dropdown - Cases are qualified for issuing a **Mediation Board Forward Letter**

Post-conditions	● Request additional information.
	    ○ Provide requested additional informations
	● Request Mediation board forward letter
	    ○ Issued mediation board forward letter or Deny request
	● Request Period extension
	    ○ Accept or Deny period extension request
	● Customer request Service
	    ○ Inform relevant parties
	● Request Settlement Plan
	    ○ Provide Settlement plan

Back - end / front - end	Frontend - Request Log, Mediation Board acceptance form, validity period extension form,
Pre status	*RO Negotiation* *RO Negotiation extension pending,* *RO Negotiation FMB Pending*
Post status	*RO Negotiation* *RO Negotiation extended* *FMB* *RO Negotiation Settle Pending*

Message of status	Status of Request response updation

Notification	RO:
	
	● Request additional information.
	    ○ Request Accept or Deny Status
	    ○ Requested details (Not through the system)
	● Request Mediation board forward letter
	    ○ Request Accept or Deny Status
	    ○ FMB Letter (Not through the system)
	● Request Period extension
	    ○ Request Accept or Deny Status with new validity period
	● Request Settlement Plan
	    ○ Request Accept or Deny Status
	    ○ If accept → "Settlement Plan created"

	Action	System Response
Success path	If Select and open a case with Request Type = FMB from request log	Directs to Mediation Board acceptance form
	If SLT staff accept request, add remark and click submit	Notify Request Accept Status Send mediation board forward letter
	Else If SLT staff reject request, add remark and click submit	Notify Request Deny Status
	Else SLT staff withdraw case	Case is withdrawn Notify Case withdrawn

	Else If select and open a case 'Request Type = period extension' from request log	
		Direct to period extension acceptance form with current Total Validity Period of the case assigned
	If total validity period month count < 5	
	If Click on Accept = Yes, add relevant calendar month count and submit	
		Notify RO with request Accept status and Extended validity period
	Else If Click on Accept = No and submit	
		Notify RO with request Deny status
	Else Click on "Withdraw" case	
		Case withdrawn and directs to pending withdraw log
	Else If select and open a case with 'Request Type = settlement plan' from request log	
		Directs to settlement plan creation form
	Create settlement plan and Submit	

	Else If select and open a case with 'Request Type = Additional Details' from request log If SLT Staff selects 'Request Provided = Yes or No' and submit	Notify RO with request Accept status with "Settlement Plan created". Notify RO
	If select and open a case with 'Request Type = Customer Service Activation' from request log If SLT Staff selects 'Request Informed = Yes or No' and submit	Notify RO
Alternate path		

Use case ID	UC024
Use case name	Mediation Board Selection
Process ID	*2.9 BP*
Actors	DebtX (Debt Recovery System)
Description	After RO requests the Mediation Board, cases go through the - F3 filter where case is identified from Account Manager code or Customer Type name. - Based on arrears amount, and case area (Metro or Region) then add the case to the Request log or Pending FTL LOD list or F2 selection list.
Pre-conditions	- RO requested to forward case to the mediation board

Post-conditions	- Case is forwarded to the
	  ● Mediation Board
	  ● FTL LOD
	  ● F2

Back - end / front - end	Backend
Pre status	*RO Negotiation FMB Pending*

Post status	Issue mediation board letter :
	
	   - *RO Negotiation FMB Pending*
	
	FTL LOD :
	
	   - *Pending_FTL_LOD*
	
	F2 :
	
	   - *LIT_Prescribed*

Message of status	-
Notification	Notify SLT Staff about requests
	Action **System Response**

Success path	Check Account Manager code and Customer Type name	
	If specific Account Manager code or Customer Type name is identified	
		Show in Case Details when Request opened from Request log
	If (Arrears Amount<50,000)	
	If DRC validity period > 3	
		Check Validity period Expired
	Else	
		Monitor DRC Validity period
	Else If (Arrears Amount >1,000,000)	
		Case Forward to FTL LOD
	Else If area == Metro	
		Forward to Request Log
	Else If area == Region	
	If Arrears Amount > 100,000	
		Forward to Request Log
	Else,	
	If Validity Period expired	
		Case Add to F2 list
	Else	

		Monitor DRC Validity period
Alternate path		

User case ID	UC025
Use case name	Mediation Board Process
Process ID	*2.15, 2.16, 2.17*
Actors	RO (Recovery Officer)
Description	Mediation Board (MB) negotiate with a customer, to a Settlement or a Non-settlement.
Pre-conditions	Mediation Board Letter have been issued
Post-conditions	Cases can either be settled or failed (Send FTL LOD). ● Agree to Settle – Start settling the arrears. ● Not Agree to Settle – Handed Non-settlement to SLT.
Back - end / front-end	Frontend: - RO Negotaition.
Pre status	*FMB (Forward to Mediation Board)*
Status	*MB Negotiation* *MB Settle Pending* *MB Settle Open-Pending* *MB Settle Active*
Post status	*MB Fail with Non-Settlement* *Case Close*
Message of status	Confirmation messages when RO submit any detail.
Notification	SLT Staff - Notifications for requests from RO RO - Notifications regarding the request replies.

	Action	System Response
Success path	If SLT accepts Mediation Board Request and provided Mediation Board forward letter	
		Case forwards to Mediation Board Case List
	If RO open a case from Mediation Board Case List	
		Show case details, mediation board response form
	If calling Round < 3	
	RO should add next calling date and,	
	If RO selects Request from Dropdown and add remark and submit	
		Display confirmation message
		Request add to request list
	Else If RO selects Customer Represented = Yes	
		Display Agree to Settle, Yes or No option
	If RO selects Agree to Settle = Yes	
		Show Settlement Plan creation form
	Fill the settlement plan and submit	

	If RO selects Agree to Settle = No	Update settlement details and monitor settlement
	If RO selects fail reason from dropdown and add the remark and submit	Show Fail reason dropdown
	Else If RO selects Customer Represented = No and add remark and submit	Update negotiation details
	Else	Update negotiation details
	If RO select Handover Non-settlement = Yes and add remark and submit	Show Non-Settlement Yes, No option
	If RO select Handover Non-settlement = No and fill the other fields and submit	Update negotiation details
		Update negotiation details accordingly
Alternate path	If there is no response, the case fails due to non-settlement with a reason and is forwarded to FTL LOD or F2 for further legal action.	

User case ID	UC027
Use case name	Create Settlement Plan
Process ID	-
Actors	SLT Staff (Internal User)

Description	The process describes the workflow and actions for Agree to Settle arrears after:
	● Negotiation (success)- [Path 10.1]
	● Mediation (success)- [Path 10.2]
	● Final Reminder / LOD - [Path 10.3]
	● FTL LOD – [Path 10.6]
	● Litigation (success)- [Path 10.4]
	● Dispute – [Path 10.5]
	Settlement inputs respective to the **arrears**
	● Initial Amount
	● Settlement Plan
	    o Plan 1 – Calendar Months
	    o Plan 2 – Slab Count – with amount for each slab
	       Maximum Slab count = 12 including initial amount
	● Remark
	
	After creating settlement plan, create appropriate task for the plans

Pre-conditions	- Path 10.1: RO negotiation success – Customer agree to settle - Path 10.2: Mediation Board success - Customer agree to settle - Cases in the pending settlement log
Post-conditions	Create a settlement plan successfully.

Back-end / Front-end	Front-end – Pending Settlement Plan cases list
	    Create Settlement plan form – Phase, Case Status, Settlement Count, Settlement History are shown
	    Input Select Plan,
	    - Plan 1 – Initial Amount, Calendar Months, Remark
	    - Plan 2 – Initial Amount, Slab Count, Slab Amount, Remark

Pre status	● Path 10.1: RO negotiation success – *RO negotiation* ● Path 10.2: Mediation Board success - *MB Negotiation* ● Path 10.3: Final Reminder – *Final Reminder* ● Path 10.3 : LOD – *LOD* ● Path 10.6: FTL LOD – Initial *FTL LOD* ● Path 10.4: Litigation success – *SLA (Success Legal Action)*

	● Path 10.5: Dispute – *Issued Settlement letter*
Post status	● Path 10.1: RO negotiation success – *Negotiation Settle Pending* ● Path 10.2: Mediation Board success - *MB Settle Pending* Same Case status but Plan status = Open, ● Path 10.3: Final Reminder – *Final Reminder Settle pending* LOD – *LOD Settle pending* ● Path 10.6: FTL LOD – *FTL LOD Settle pending* ● Path 10.4: Litigation success – *Litigation Settle pending* ● Path 10.5: Dispute – *Dispute settle pending*
Message of status	● Plan created successfully
Notification	-

	Action	System Response
Success path	SLT Staff directs Settlement pending Case List SLT Staff selects a case to create plan If SLT staff, click Settlement Count If SLT Staff selects Plan 1 from dropdown Based on the arrears amount, SLT Staff inputs initial amount with calendar months, Enter remark and submit	Directs to create settlement form along with the case details (Phase, Case status, Settlement count) Show Settlement History for each. Show calendar months, initial amount, remark to input When the user selects the Calendar months, the validity period is

		automatically calculated and displayed in the section.
	Else If SLT Staff selects Plan 2 from dropdown	
	Based on the arrears amount, SLT Staff inputs slab count,	Successfully create plan for the case and notify relevant parties
	Enter amount for each slab, Remark and submit form	
		According to the selected slab count, slab sections will open to enter the pay amount
		Successfully create plan for the case and notify relevant parties
Alternate path		

User case ID	UC028
Use case name	Create Settlement Plan
Process ID	
Actors	Recovery Officer (RO)
Description	The process describes the workflow and actions for Agree to Settle arrears after: ● Negotiation (success)- [Path 10.1] ● Mediation (success)- [Path 10.2] Settlement inputs respective to the **arrears** ● Initial Amount ● Calendar Months ● Remark After creating settlement plan, create appropriate task for the plans
Pre-conditions	● Path 10.1: RO negotiation success – *Negotiation Settle Pending* ● Path 10.2: Mediation Board success - *MB Settle Pending.*
Post-conditions	Create a settlement plan successfully.
Back-end / Front-end	Front-end – Negotiation Form Create Settlement plan – ● Initial Amount, Calendar Months, Remark
Pre status	*RO Negotiation* *MB_Negotiation* *RO_Negitiation_Extended*
Post status	*Plan status = Open* Case status *Negotiation_Settle Pending* *MB_Settle Pending*
Message of status	Confirmation messages Successful message or Error message
Notification	**System notifications** ● (Path 10.1, 10.2): Notify SLT - Settlement plan created
	Action	**System Response**

Success path	If negotiation success RO, selects Agree to Settle from Field reason dropdown,	Show Settlement Plan creation form
	Based on the arrears amount, RO inputs initial amount, calendar months, Remark and submit form	Successfully create plan for the case and notify relevant parties
Alternate path		

User case ID	UC029
Use case name	Settlement Process
Process ID	*7*
Actors	DebtX (Debt Recovery System)
Description	Monitor the selected settlement plan. 　　Plan 01: Calendar Month period, Initial Amount 　　Plan 02: Slab count, amount and duration Payment and arrears details updated along with the BSS.
Pre-conditions	- 　Case has an Open Settlement Plan.
Post-conditions	Settlement plan = complete → Case close Settlement plan = expires, due to exceeding the duration.
Back-end / Front-end	Back-end
Pre status	● 　Path 10.1 - Negotiation- *Negotiation Settle Pending* ● 　Path 10.2 - Mediation Board- *MB Settle Pending* ● 　Path 10.3 - Final Reminder- *Final Reminder Settle Pending* ● 　Path 10.3 - LOD- *LOD Settle Pending* ● 　Path 10.4 - Litigation- *Litigation Settle Pending* ● 　Path 10.5 - Dispute- *Dispute Settle Pending* ● 　Path 10.6 - FLT LOD - *FTL LOD Settle Pending* ● 　WRIT - *WRIT Settle Pending* ● 　Re-WRIT - Re-*WRIT Settle Pending*
Post status	Arrears = 0; 　　*Case close* Plan Status = Active ● 　Path 10.1 - Negotiation- *Negotiation Settle Open-Pending/Active* ● 　Path 10.2 - Mediation Board- *MB Settle Open-Pending/Active* ● 　Path 10.3 - Final Reminder - *Final Reminder Settle Open-Pending/Active* ● 　Path 10.3 - LOD - *LOD Settle Open-Pending/Active* ● 　Path 10.4 - Litigation- *Litigation Settle Open-Pending/Active* ● 　Path 10.5 - Dispute- *Dispute Settle Open-Pending/Active* ● 　Path 10.6 - FLT LOD- *FTL LOD Settle Open-Pending/Active* ● 　WRIT - *WRIT Settle Open-Pending/Active* ● 　Re-WRIT - Re-*WRIT Settle Open-Pending/Active*

	Plan Status != Active ● Path 10.1 - *FMB* ● Path 10.2 - *FMB Failed with Non-Settlement* ● Path 10.3 - *Pending Write Off* ● Path 10.5 - *Pending Write Off* ● Path 10.6 - *Initial Litigation* ● Path 10.4 - *Forward To Writ* ● WRIT - *Forward To Re-Writ*	
Message of status	-	
Notification	-	
	System action	**System Response**

Success path	Read the selected plan.
	
	Start Monitoring payment
	
	If payment is received (initial payment or any payment slab)
	
	    If Payment Status OK (payment can add for the arrears)
	
	        If Payment value >= Initial Amount
	
	        If Payment value > 0 & < Initial Amount
	
	        Update case status along with the plan status
	
	        Else (return cheque/ Billing dispute/ Balance transfer)
		Change settlement status = Active
		
		Change settlement status = Open-Pending

		Adjust Arrears amount and payment details and update case details accordingly.
	_____	
	If plan status == Active	
	If Arrears amount = 0	
	If Arrears > 0	Case Close
	If validity period expired	Check billing adjustment and then Check the validity period
	If path = 'Agent'	
	If path = Mediation Board	Add case to F2 list and Change case status "LIT Prescribed"
	If path = LOD/ Final Reminder	Change case status "Pending Non-Settlement"
	If Path = 'Dispute'	Add case to Pending Write-Off log and send for approval
	If Path = FTL LOD	Add case to Pending Write-Off log and send for approval
	If Path = Litigation	Add case to Litigation list and Change case status "Initial Litigation"

		Add case to WRIT list and Change case status "Forward to WRIT"
Alternate path	If a user paid without a settlement plan through the monitor payment case, the arrears amount should be updated accordingly.	

User case ID	UC030
Use case name	Write-off process
Process ID	9.2
Actors	SLT Staff (Internal User), DebtX
Description	The write-off process is where the unsuccessful cases are stop the recovery process
Pre-conditions	- After receiving Final Reminder / LOD no customer response && arrears amount != 0 - After receiving the dispute letter, the customer doesn't reply or agree to a settlement - After ending a Final Reminder/ LOD and creating a settlement plans or After Creating a settlement plan in the dispute process, but the settlement plan has not been activated (doesn't paid at least the initial amount) and the monitoring period have expired - Unsuccessful Re-Writ process
Post-conditions	Cases added to the write-off log successfully
Back-end / Front-end	Front-end Pending write-off log Back-end - Add case from Pending Write-Off list to Write-Off log
Pre status	*LOD Monitoring Expire* *LOD settle Pending/ Open-Pending* *Final Reminder settle Pending/ Open-Pending* *Dispute settle Pending/ Open-Pending*
Post status	*Write off*
Message of status	Confirmation messages
Notification	Notify SLT
	Action	**System Response**

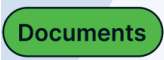|		
Success path	If Pre-Condition is fulfilled Then CAM has been changed the customer segment of the Pending write off case's to "100"	Send case to Write Off approval Change case status to "Pending Write-off" Add case to Write off log Change case status "Write-Off"
Alternate path		

User case ID	UC031
Use case name	FTL LOD Process
Process ID	3.1.1
Actors	SLT Staff
Description	Cases Eligible for FTL LOD, should receive FTL LOD (LOD with Manual Signature). After receiving a FTL LOD, Customer should settle. If the settlement success case will close, the failed cases are forwarded to the Litigation process.
Pre-conditions	Cases should be failed from the Mediation board process and received Non-Settlement letter from DRC & Last payment duration < 6 years.
Post-conditions	FTL LOD settle successful = Case close failed cases added to Litigation log
Back-end/front-end	Front-end - FTL LOD case list
Pre status	*Pending FLT LOD*
Status	*Initial FTL LOD* *FTL LOD Settle Pending* *FTL LOD Settle Open Pending* *FTL LOD Settle Active*
Post status	*Case close* *Initial Litigation*
Message of status	-
Notification	-

Success path	Action	System Response
	If the Mediation Board fails && Last payment duration < 6 years && Non-settlement is collected	

	SLT Staff select the relevant template according to the customer's details from the provided screen and click on the create button.	Direct Case to FTL LOD list, show create pdf button
	The created FTL LOD cases will be displayed in the FTL LOD List, status = Initial FTL LOD	Direct to FTL LOD screen where the user can preview a single document created and create relevant tasks.
	If customer agree to settle, SLT staff click create settlement button	Change create pdf button to create settlement button
	Enter settlement details and submit.	Direct to Create settlement form
	While duration <= 2 weeks	Update settlement details
	If duration > 2 weeks	
	Check Arrears == 0	Monitor Payment
	Else	Case close

		Change case status to "Initial Litigation"
		Case added to litigation log
Alternate path		

User case ID	UC032
Use case name	Litigation Process
Process ID	4
Actors	SLT Staff, Legal Department
Description	Cases failed from FTL LOD are forwarded to litigation, after collecting necessary documents, cases are given to the Legal Department to follow legal actions. According to the legal actions case close, Write Off or forward to WRIT.
Pre-conditions	Cases should be failed from FTL LOD and Added to the litigation log.
Post-conditions	Case close or Write off According to the settlement status case close or forward to WRIT.
Back-end/front-end	Frontend - Update legal document details and legal submission status Backend - Monitor settlement process and case forward to WRIT
Pre status	*Initial Litigation*
Status	*Pending FTL (Forward to litigation)* *FTL* *FLU (Fail from Legal Unit)* *FLA (Fail Legal Action)* *SLA (Success Legal Action)* *Litigation Settle Pending* *Litigation Settle Open-Pending* *Litigation Settle Active*
Post status	*Case Close* *Pending Write-Off* *Forward to WRIT*
Message of status	-
Notification	**-**

Success path	Action	System Response
	Select case from Initial litigation cases with litigation pending log and,	
	If user click document button	Direct to Litigation document submission form
		RTOM customer file (dropdown)
		DRC File (dropdown)
	User select document status	
	RTOM Customer file →	
	Requested	
	Collected	
	Without Agreement	
	DRC File →	
	Requested	
	Collected	Update file status accordingly and,
		If RTOM Customer file status = Without Agreement/ Collected && DRC Dile status = Collected
		Activate Green "Document" button
		Documents
		(which mean documents are ready and case can forward to legal department)
		Else

		Keep the "Document " button White (which mean documents are ready and case can forward to legal department)
	If Case's document status is OK (which mean the document button is green)	
	User submit the case to Legal department and,	
	If legal department accept the case click on "Legal Submitted" button	Update case status to "FTL" Display buttons related to cases as "Create settlement" and "Legal Fail"
	After legal Process,	
	If Legal Process success	Navigate to Settlement creation page

		Click on Settlement button	Update case status as "Litigation Settle Pending"
		Enter relevant details and submit	Update case status as "FLA" Case added to Pending Write off log and forward for approval
		If the Legal Process failed	
			Update case status to "FLU" and case forward for approval and added to pending Write-Off log and
		If legal department Refuse to accept the case click on "Legal Fail" button	
Alternate path			

User case ID	UC033
Use case name	WRIT
Process ID	6 , 6.1
Actors	Legal Department (External)
Description	WRIT can be created after litigation settlement fails.
Pre-conditions	● Litigation Settlement Plan status is not active ● Litigation settlement monitor duration 2 months exceeded and Settlement is not successful.
Post-conditions	● Create WRIT successfully. ● WRIT is settled ● Created Re-WRIT successfully
Back-end / Front-end	-
Pre status	*FTW (Forward To Writ)*
Status	*WRIT* *WRIT Settle Pending* *WRIT Settle Open-Pending* *WRIT Settle Active*
Post status	Success - *Case Close* Fail - *Forward to Re-Writ*
Message of status	-
Notification	-
	Action	**-**
Success path	Create the relevant WRIT template according to the case If WRIT Settlement = Successful	Get the details relevant for the WRIT template Create the WRIT and WRIT settlement. Case close

	Else,
	   If duration > 2 months
	
	   Else,
		Create Re-Writ with appropriate tasks.
		
		 Change the status to "Forward to Re-Writ"
		
		Monitor payment

Alternate path		

User case ID	UC034
Use case name	RE-WRIT
Process ID	6.3, 6.4
Actors	Legal Department (External)
Description	RE-WRIT can be created once the WRIT settlement is not successful.
Pre-conditions	● WRIT settlement is not a success ● WRIT settlement Duration > 2 months ● Re-Writ tasks should be created
Post-conditions	Case close Case Write Off
Back-end / Front-end	-
Pre status	*Forward to Re-Writ*
Status	*Re-WRIT* *Re-WRIT Settle Pending* *Re-WRIT Settle Open-Pending* *Re-WRIT Settle Active*
Post status	Success: *case close* Fail: *Pending Write-off*
Message of status	-
Notification	-
	Action	**-**
Success path	Create Re-Writ tasks If Re-Writ settlement successful Else,	Status = "Forward to Re-writ' Case close

		Case added to "Pending Write-off" log and forward for approval
Alternate path		

Use case ID	UC035
Use case name	F2
Process ID	3.3
Actors	SLT Staff
Description	Cases that are: ● Mediation board failed and case last payment duration > 6 years ● Direct LOD-eligible (arrears between 1,000 & 5,000) cases ● Cases forwarded to request log to forward mediation board which has account manager code = "CS1_GOV", CS1_VLB", "CS2_CM1", "CS2_CM2", customer type name = "**government**" or **"corporate"** and haven't accepted the request (Government and Corporate cases won't forward to the mediation board unless SLT staff decided to forward it) . The cases in the F2 process will be divided into ● Final reminder ● LOD which means two types of Digital signature Letters Of Demand.
Pre-conditions	● Cases should be failed Mediation board process, and last payment duration should be more than 6 years ● Cases should be forwarded from Direct LOD ● Cases have Validity period expired or account manager code = "CS1_GOV", CS1_VLB", "CS2_CM1", "CS2_CM2" , customer type name = "government" or "corporate" which are failed from requesting mediation board forwarding process.
Post-conditions	Send Final Reminder with notification to the cases which are, - Account manager code = "CS1_GOV", CS1_VLB", "CS2_CM1", "CS2_CM2" - Customer type name = "Government" or "Corporate"

	- Arrears Amount < 3000 Send LOD (with digital signature) and notification that are not eligible for Final Reminder..
Back-end/front-end	Front-End
Pre status	*LIT Prescribed*
Post status	*Final reminder* *Initial LOD*
Message of status	-
Notification	-

	Action	System Response
Success path	If the mediation board is not successful and the last payment duration is greater than 6 years, If the incident is eligible for the Direct LOD process, SLT Staff selects incidents then click proceed	 F2 process status= 'LIT Prescribed"

| | User Navigate to Digital Signature LOD page (F2).

Select Final Reminder from the F2 dropdown.

Select LOD from the F2 dropdown. | Incidents proceed as cases and directed to the F2 process

Status = "LIT Prescribed"

Filter cases and display Final Reminder eligible cases in the table.

Filter cases and display LOD eligible cases in the table. |
|---|---|---|
| **Alternate path** | - | |

User case ID	UC036
Use case name	Final Remainder (With Digital Signature)
Process ID	3.4
Actors	Debt Recovery System (DebtX), SLT Staff
Description	Cases with specific account manager codes or customer type names and arrears amount < 3000 will be directed to Final Reminder.
Pre-conditions	Arrears Amount < 3000 Specific Account Manager codes and Customer Type names should be directed
Post-conditions	Created Final Reminder and send to the customer
Back-end/front-end	Back-end, Front end
Pre status	*LIT Prescribed*
Status	*Final reminder* *Final Reminder Settle Pending* *Final Reminder Settle Open-Pending* *Final Reminder Settle Active*
Post status	*Pending Write Off* *Case Close*
Message of status	-
Notification	Notify the SLT Staff

	Action	System Response
Success path	SLT Staff can select Final Reminder from F2 dropdown	
		If specific Account Manager Codes or Customer type

		names && Arrears Amount < 3000 are identified
		Display Final Reminder eligible cases on the list
	Select cases as a batch or individual from the screen either by entering the count or selecting the check box.	
	Click the create final reminder button.	
		Create a Excel file with case details and notify user when it ready for downloading
	Send list to the relevant company (External) for send final reminders to customer	Cases added to Final reminder list
	Navigate to Final Reminder list	
	If edit button is clicked	
		Customer Response entering screen shown
	If user agrees to settle	

		Navigate to settlement plan creation and add relevant data and submit
	Else If customer dispute	
		Add case to the Dispute list
	Else If Request more information	
		Provide informations to customer
	Else If preview button is clicked	
		Display customer response history, Settlement history, Payment history details
		_____
		If Final Reminder monitor duration > 1 year
		Check arrears amount
		If arrears amount = 0
		Change Case Status = Case close and add case to closed case list
		Else

		Change Case Status = pending write off Add case to Pending Write off log and send for approval
Alternate path		

User case ID	UC037
Use case name	LOD (With Digital Signature)
Process ID	3.5
Actors	Debt Recovery System (DRS), SLT Staff
Description	Cases which not fulfil the final reminder criteria will be tagged as LOD (Digital Signature)
Pre-conditions	● Select specific Account Manager Name or Account Manager Code and filter the data. ● Arrears amount > 3000.
Post-conditions	Created LOD.
Back-end/front-end	Back-end, Front end
Pre status	*LIT Prescribed*
Status	*Initial LOD*
Post status	*LOD –Settle pending* *LOD monitoring expire* *Pending Write off* *Case Close*
Message of status	-
Notification	Notify the SLT Staff

	Action	System Response
Success path	SLT Staff can select LOD from F2 dropdown Select cases as a batch or	If Arrears Amount > 3000 are identified Display LOD eligible cases on the list

	individual from the screen either by entering the count or selecting the check box.
	
	Click the create LOD button.
	
	Send list to the relevant company (External) for send LODs to customer
	
	Navigate to LOD list
	
	If edit button is clicked
	
	     If user agrees to settle
	
	     Else If customer dispute
	
	     Else If Request more information
	
	Else If preview button is clicked
		Create a Excel file with case details and notify user when it ready for downloading
		
		Cases added to LOD list
		
		Customer Response entering screen shown
		
		Navigate to settlement plan creation and add relevant data and submit
		
		Add case to the Dispute list
		
		Provide informations to customer
		
		Display customer response history, Settlement history, Payment history details
		
		_____
		
		If LOD monitor duration > 1 year
		
		Check arrears amount

		If arrears amount = 0 Change Case Status = Case close and add case to closed case list Else Change Case Status = pending write off Add case to Pending Write off log and send for approval
Alternate path		

User case ID	UC038
Use case name	Dispute
Process ID	
Actors	DebtX (Debt Recovery System), SLT Staff Billing centers
Description	Customers respond to LOD/Final Reminder as a dispute. With the response of the customer, SLT Staff sends a dispute letter.
Pre-conditions	Cases have been added to the dispute list.
Post-conditions	- Handed over to relevant place - Case closed. - Case Write off
Back-end/front-end	Front end
Pre status	*Pending Dispute Letter*
status	*Issued Dispute Letter* *Pending settlement letter* *Forward LOD Dispute* *Dispute Settle Pending* *Dispute Settle Open-Pending* *Dispute Settle Active*
Post Status	*Case Close* *Pending Write off*
Message of status	-
Notification	-
	Action	**System Response**

Success path	Receive customer response and select case from dispute list	
	Update user's response	
	If response = Agree to settle	Navigate to settlement creating page
	If response = Dispute	
	Select hand over to another channel	
	Enter handing over channel and relevant other details	
	Click on submit	
		Record added and inform relevant parties (externally)
		Cases added to the [ost dispute log
	Monitor Payment through 1 year	
		If arrears = 0
		Case close
		Else
		Case added to the pending write-off log and send for approval
	If customer response for dispute letter > 3 months	
		Case added to the pending write-off

		log and send for approval
Alternate path		