



Debt Recovery System Business Requirement Document Version 3



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1. Executive Summary

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. The approach reduces financial losses from unpaid arrears and unreturned equipment. Improve **accountability, tracking, and communication** between Recovery Officers (ROs) and Debt Recovery Company (DRC) to ensure quick resolution of cases while following legal and organizational policies. And also, commission calculation and payment systems for Debt Recovery Companies (DRC) based on resolved cases.

1.2. 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, RO activities through the system and they can provide necessary information and activities such as request mediation board letter, extended period.

• 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 commissions 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
- o BULK Report Account Number
- o BULK Report Case ID



1.3. 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 and bulk incident registration, 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, 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 Letter 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. System will facilitate the **write-off process**, transitioning cases marked as "pending write-off" to the status of "write-off".

Furthermore, SLT will pay DRC **1,000 LKR for handing over non-settlement letters** to customers, adding efficiency to the process while ensuring accountability.

1.4.Stakeholders

- SLT Recovery Officers
- Debt Recovery Companies (DRCs)
- Recovery Officers (ROs)
- SLT Legal Team
- SLT Debt Recovery Finance Team
- SLT Admin Team



2. Business Context

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:

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

If the action involves collecting the CPE unit, the necessary details are provided to the RO, and a negotiation process is initiated with the customer. The case is marked as successful once the unit is collected and accepted by the RCMP, unless the collection of CPE fails.

If the action involves arrears collection, the negotiation process takes place between the RO and the customer. Successful negotiations lead to the settlement process, where commissions are calculated for the RO based on the payment received. If negotiations fail, the case is referred to the mediation board for further resolution. Subsequently, cases may follow a dispute resolution path or proceed to the LOD process, depending on the customer's response. Cases directed to the LOD process follow predefined criteria and move into the litigation process.



The current manual approach presents significant challenges, including inefficiencies, data redundancy, and the risk of human error. Recovery Section officers rely heavily on manual intervention to process customer accounts, with inputs retrieved from systems like OSS, BSS, and CRM. This results in a time-consuming workflow prone to delays and inaccuracies, highlighting the need for automation.

The cases with "pending write-off" status will be sent to BSS and it will update the segment to 100 where case is terminated, and the updated cases will be shown in the write-off log.

2.2.Problem Statement

The existing debt recovery system at SLT is heavily reliant on manual processes, resulting in several operational challenges. **Inefficiency and high time consumption** are prevalent, as manual workflows delay case assignments, negotiations, and escalations. The reliance on multiple systems, such as BSS, OSS, and CRM, leads to **data redundancy and inaccuracy**, with duplication and errors frequently occurring. Furthermore, the process is **heavily dependent on human intervention and paperwork**, making it resource-intensive and prone to mistakes. The recovery operations are inherently **complex and lengthy**, and the lack of automation contributes to workflow inefficiencies and delays. Additionally, the current system provides **limited monitoring and reporting capabilities**, restricting the ability to track case progress and assess performance effectively. Finally, the **lack of centralized collaboration and delayed escalations** complicate coordination among stakeholders, impacting the overall efficiency of the recovery process. These challenges collectively highlight the urgent need for a robust, automated solution to streamline workflows, enhance accuracy, and improve operational efficiency.



2.3. Proposed Solution

The proposed system aims to **automate and optimize the debt recovery process** at SLT, addressing the inefficiencies and challenges of the current manual approach. The new system will enable users to **add or register cases individually or in bulk**, significantly reducing the time and effort required for case entry. By **integrating with the data lake**, arrears cases will be automatically directed to the debt recovery system, eliminating the need for manual intervention during the initial stages of case creation.

Once cases are updated in the system, SLT officers can **proceed to the relevant process path** following **confirmation and approval**, ensuring compliance with organizational policies. The system will also **automatically calculate commissions and bonuses** for Recovery Officers (ROs) based on the arrears recovered from customers, promoting fairness and efficiency in reward distribution.

In instances where a case is not resolved successfully, the system will ensure that the case is **escalated to the appropriate path**, whether it involves legal proceedings, mediation board, or reassigning to DRC or RO for further negotiation. Additionally, **real-time alerts and notifications** will be sent to both SLT officers and customers, ensuring transparency and keeping all stakeholders informed throughout the recovery process.

The solution will also include robust features such as:

- Centralized dashboards and reporting tools for monitoring case progress and evaluating performance.
- **Automated workflows** to streamline case assignments and reduce delays.
- Secure data handling and compliance mechanisms to ensure the integrity and confidentiality of customer information.
- **Detailed Reports** to ensure thorough documentation will be generated with filtrations.

By automating critical aspects of the debt recovery process, the proposed system will **enhance operational efficiency**, **reduce errors**, and **improve stakeholder collaboration**, resulting in faster case resolutions and higher recovery rates.



3. Business requirement

3.1. Functional requirements

1. Case Management:

- Enable users to add or register cases individually or in bulk through a user-friendly interface.
- Ensure that if multiple products associated with the same Customer Reference (CR) or account are issued for recovery, all products are assigned to the same DRC.
- If additional products are issued over time and the original case remains active with the assigned DRC, the remaining products should also be handed over to the same DRC to maintain consistency and avoid duplication.
- Automatically assign cases to Debt Recovery Companies (DRCs) and Recovery Officers (ROs) based on predefined criteria.
- Provide features to update and track the status of cases in real-time.

2. Integration with Existing Systems:

- Integrate seamlessly with BSS, OSS, CRM, and Data Lake to automatically import arrears cases and customer data.
- Ensure bi-directional data flow between the debt recovery system and existing platforms to maintain data accuracy and synchronization.

3. Automated Notifications and Alerts:

- Send real-time notifications and alerts to SLT officers, DRCs, and ROs about case updates, deadlines, and escalations.
- Notify users about overdue cases and pending actions.

4. Commission and Bonus Calculation:

- Automatically calculate commissions and bonuses for DRCs based on successful case resolutions and payment amounts.
- Provide detailed reports for finance teams to ensure accurate payment processing.

5. Workflow Automation:

- Automate case assignments, escalations, and legal workflows, including the generation of Letters of Demand (LOD).
- Escalate unresolved cases to mediation boards or legal teams based on predefined criteria
- Ensure that cases marked with a special source type are automatically updated from CAM while assigned to a Recovery Officer (RO).
- Allow the system to automatically update the action type when changes, such as product termination, occur.



6. Negotiation and Settlement Management:

- Allow ROs to record negotiation outcomes and update case details in real-time.
- Facilitate settlement tracking and payment confirmations to close cases efficiently.

7. Legal and Escalation Processes:

- Support the generation of legally compliant documents such as Final Reminders, LODs, and FTL LODs with digital and manual signatures as required.
- Track and manage cases referred to mediation boards or legal teams.

8. Monitoring and Reporting:

- Provide centralized dashboards for SLT management to monitor case progress and recovery activities.
- Generate detailed reports and analytics for evaluating the performance of ROs, DRCs, and recovery strategies.

9. User Role and Access Management:

- Implement role-based access controls to ensure secure and appropriate access for SLT officers, ROs, and DRCs.
- Allow administrators to manage user roles, permissions, and accounts.

10. Audit and Compliance Tracking:

• Maintain an audit trail of all actions performed in the system for accountability and compliance with organizational and legal standards.

11. Customer Communication:

• Allow ROs to send reminders, updates, and negotiation terms to customers via integrated communication tools.

12. Write-Off Management:

• Maintain a record of all write-off cases for auditing and compliance purposes.

13. Reporting:

- Generate and distribute comprehensive reports with more filtration options, including:
 - o Daily Payment Report
 - LOD Collection Report
 - o BULK Report Account Number
 - o BULK Report Case ID



3.2. Non-Functional Requirements

1. 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.

2. Scalability

Support future growth in users, cases, and data sources without performance degradation.

3. Availability

Ensure 85% uptime for continuous access to all stakeholders.

4. Security

Implement AES-256 encryption and multi-factor authentication (MFA) to protect data, complying with industry standards for data privacy.

5. Usability

Provide an intuitive interface that minimizes training needs and supports multilanguage functionality if required.

6. Maintainability

Use modular architecture to enable updates and upgrades with minimal downtime.

7. Compliance

Adhere to legal and regulatory standards, ensuring generated documents meet compliance requirements.

8. Reliability

Prevent data loss with automated backups and recovery mechanisms while maintaining data integrity.

9. Compatibility

Integrate seamlessly with existing systems like BSS, OSS, CRM, and commonly used devices and browsers.

10. Auditability

Maintain a detailed log of all system activities for accountability and compliance.

11. Extensibility

Allow future enhancements, such as integrating new tools or workflows, without major reengineering.

12. Accessibility

Ensure compliance with accessibility standards to accommodate users with disabilities.

13. **Response Time**

Maintain a consistent response time of under 2 seconds for standard operations.

14. System Visibility

Provide stakeholders with role-based access to real-time system status, activity logs, and case progress via dashboards and notifications.



4. Key Performance Indicators (KPIs)

- 1. Optimize Recovery Operations
 - Case Resolution Time: Reduce the average time to resolve arrears and equipment recovery cases by 25%.
 - Real-Time Updates Usage: Ensure 90% of Recovery Officers (ROs) use the mobile portal to update negotiations in real-time within the first three months.
 - **Process Transparency Index:** Increase the percentage of cases with complete and up-to-date information accessible to stakeholders to **95**
- 2. Enhance Monitoring Capabilities
 - RO Activity Monitoring Compliance: Ensure 95% of Recovery Officers' (ROs) activities are tracked and visible to SLT officers through the system.
 - Action Request Fulfillment Time: Reduce the average time taken to process requests, such as mediation board letters or extended periods, by 20%.
 - Case Escalation Accuracy: Ensure 100% accuracy in case escalations based on predefined criteria.
- 3. Facilitate Legal and Mediation Board Activities
 - Automated Document Generation Rate: Generate 100% of Final Reminders and Letter of Demand (LOD) automatically through the system.
 - Case Escalation Success Rate: Ensure that 95% of escalated cases reach the appropriate mediation boards or legal teams without errors.
 - **Document Processing Time:** Reduce the average time to generate and approve LODs by **30%** compared to the manual process.
- 4. Automate Commission Payments
 - Commission Calculation Accuracy: Achieve 100% accuracy in calculating commissions for Debt Recovery Companies (DRS).
 - Payment Processing Time: Near real-time process commissions and bonuses, ensuring timely disbursements.
- 5. Leverage Insights for Performance Optimization
 - **Dashboard Adoption Rate:** Ensure that **90% of SLT management** actively use interactive dashboards and reports within the first three months of implementation.
 - **Recovery Performance Improvement:** Use insights to increase recovery success rates by **15%** within the first six months.
 - **Reporting Accuracy:** Maintain **100% accuracy** in system-generated performance reports[1]
- 6. Reduce Human Capital Dependency
 - **Decrease reliance on manual processes** by reducing human capital requirements by up to **90%**, enhancing efficiency and scalability.



5. Assumptions and Constraints

5.1. Assumptions

• System Adoption:

All stakeholders, including SLT officers, Recovery Officers (ROs), and Debt Recovery Companies (DRCs), will adopt and actively use the new system as intended.

• Data Availability:

Existing data from systems like BSS, OSS, and CRM will be accurate, complete, and readily available for integration with the new system.

• Infrastructure Readiness:

SLT's IT infrastructure, including servers and networks, will support the implementation and smooth operation of the debt recovery system.

• Training and Support:

Adequate training and support will be provided to all users to ensure smooth onboarding and effective use of the system.

• Regulatory Compliance:

The system will comply with all existing legal and regulatory requirements relevant to debt recovery operations.

• Funding and Resources:

Sufficient funding and resources will be available to complete the development, deployment, and maintenance of the system.

• System Security:

Assumes that robust cybersecurity measures, such as encryption and authentication, will be implemented to protect sensitive data.



5.2. Constraints

• Time:

The project must be completed within the predefined timeline, with all features implemented and tested before the agreed delivery date. Any delays in development, testing, or deployment could impact the overall project schedule.

• Cost:

The system development and implementation must remain within the allocated budget. This includes costs for resources, tools, infrastructure, training, and post-implementation support. Budget limitations may restrict additional features or customizations.

• Quality:

The system must meet high standards of quality, ensuring reliability, security, and user satisfaction. To maintain quality, all features must undergo thorough testing, and any compromises in quality to meet time or cost constraints must be carefully evaluated.

Scope:

The features and functionality must align with the agreed-upon scope of the project. Changes to the scope, such as adding new features or integrations, must go through proper approval channels and may impact time, cost, or quality.

• Team Related Constraints:

The team is assembled in a short time period with less technical, industrial knowledge and experience.



6. Risks and Mitigation

Risk Category	Risk Description	Impact	Likelihood	Mitigation Strategy	Risk Owner
Technical	Integration challenges with legacy systems (BSS, OSS, CRM).	High	Medium	Conduct thorough testing and use middleware for compatibility.	IT Team
Operational	Resistance to adoption by Recovery Officers (ROs).	High	Medium	Provide training, user-friendly interfaces, and continuous support.	Project Manager
Resource	Budget overruns.	High	Medium	Monitor costs regularly and prioritize critical features.	Finance Team
	Less experience project team	Medium	Medium	Provide comprehensive training and onboarding the team with necessary skills	Project Manager
Compliance	Changes in regulatory requirements.	Medium	Low	Monitor regulatory updates and design for flexibility in compliance.	Legal Team
Security	Data breaches during or after implementation.	High	Low	Implement AES-256 encryption, MFA, and regular security audits.	IT Security Team



7. Stakeholder requirements (Role wise)

• SLT Recovery Officers

- o Distribute cases to the Debt Recovery Companies (DRC).
- o Monitor the progress of cases.
- Make decisions on optimizing processes based on system-generated analytics.

• Debt Recovery Companies (DRCs)

- Assign cases to Recovery Officers (ROs) for follow-up and resolution.
- Track the progress of assigned cases and ensure timely updates are provided to SLT.

• Recovery Officers (ROs)

- Serve as the primary users of the mobile portal to update negotiation details, track recovery activities, and record case progress in real-time.
- Engage with customers to negotiate settlements for arrears and recover CPE.
- Provide regular updates on case statuses and request information from SLT.
- Collaborate with SLT to manage escalations and facilitate legal actions for unresolved cases.

SLT Legal Team

- o Handle unresolved cases escalated for mediation or legal actions.
- Provide input on and oversee the integration of legal workflows, including generating and sending:
 - ❖ Final Reminders (with digital signatures).
 - Letters of Demand (LOD) (with digital signatures).
 - ❖ FTL Letters of Demand (FTL LOD) (with manual signatures).

• SLT Debt Recovery Finance Team

- Manage commission payments for Debt Recovery Companies (DRCs).
- Integrate recovery-related financial data with existing financial systems to ensure accurate payment processing.
- Provide insights and reporting on financial performance related to recovery operations.



8. Approval and sign off

Name	Designation	Date	Signature
Asanga Wimalarathne	General Manager - Revenue Collection		
Thilak Medagedara	Deputy General Manager - Recoveries & Regional Finance		
Damithri Palliyaguru	Senior Legal Officer- Recoveries		
K. H. P. D. U. Kumari	Senior Executive Assistant Manager (IT)/ Recoveries & Regional Finance Section		

Name	Designation	Date	Signature
Janaka Harambearachchi	General Manager - Digital Platforms		
Kosala Thennakoon	Deputy General Manager - Digital Platforms		
Nishantha Alwis	Manager - Software Development		



9. Appendices

9.1. Flow Diagram

Module Diagram

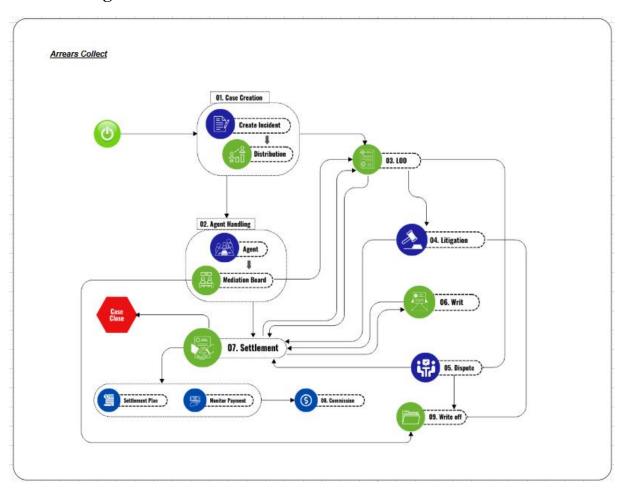


Figure 1.1: Module Diagram_Arrears Collection



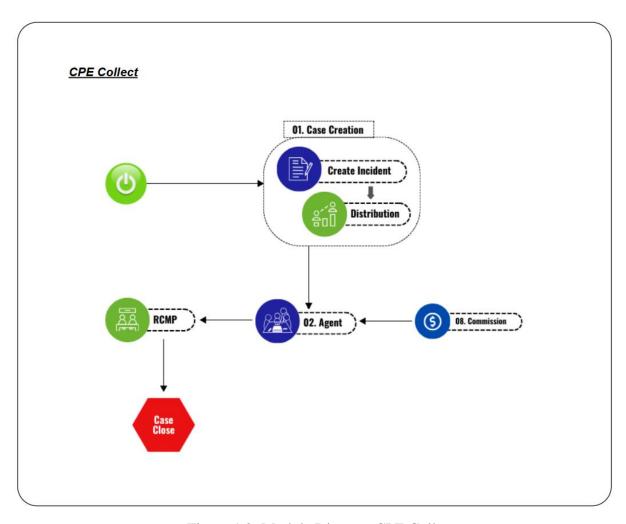


Figure 1.2: Module Diagram CPE Collect



Main Diagram

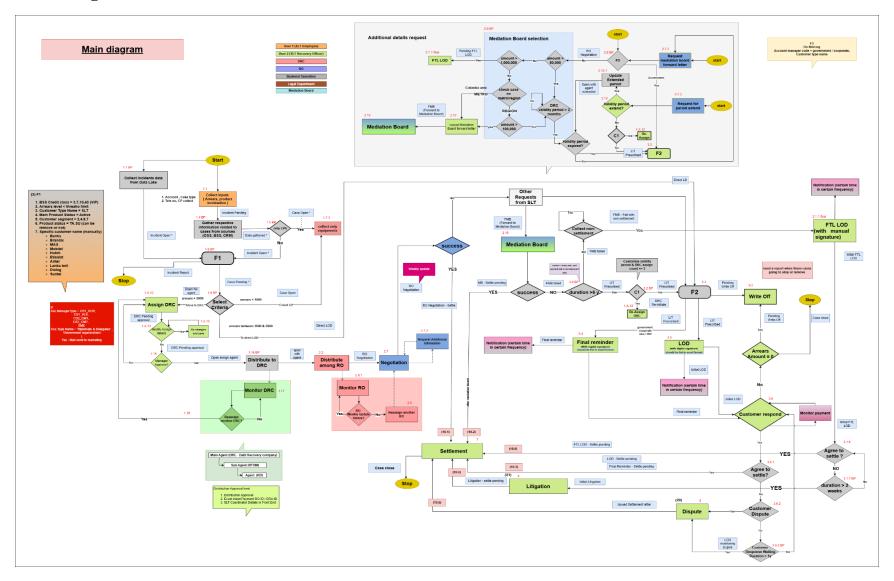


Figure 2: Main Flow

Business Requirement Document



CP Collection Process

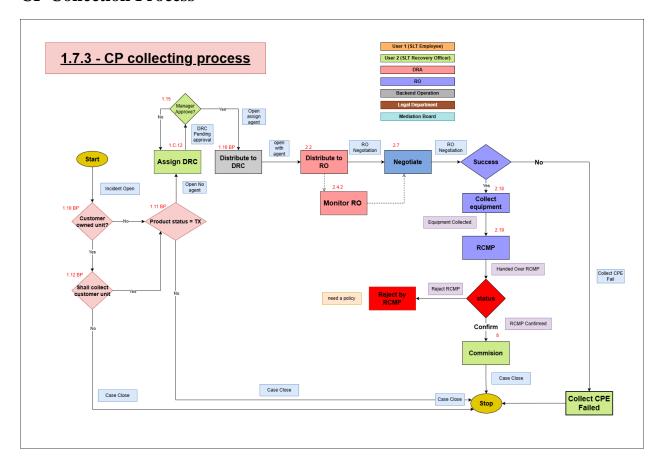


Figure 3: CP Collection Process



Mediation Board Process

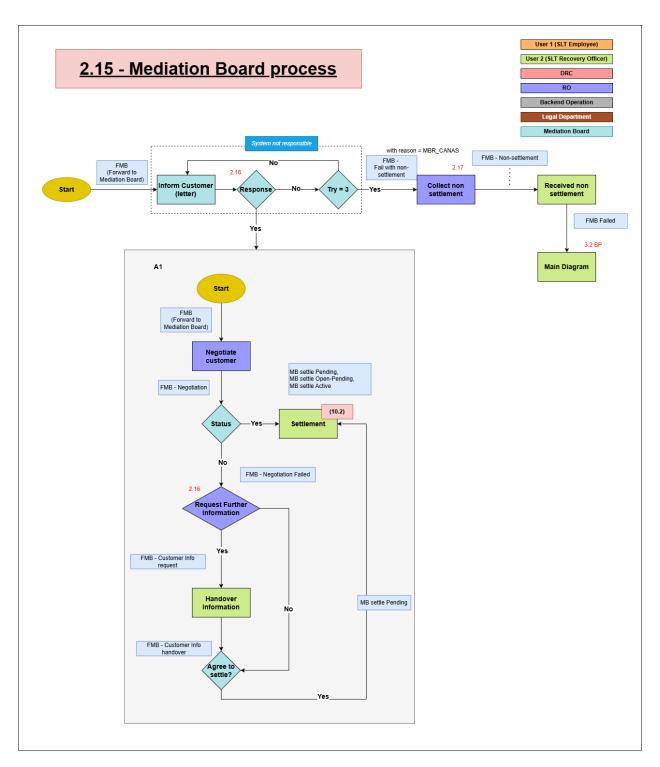


Figure 4: Mediation Board Process



Litigation Process

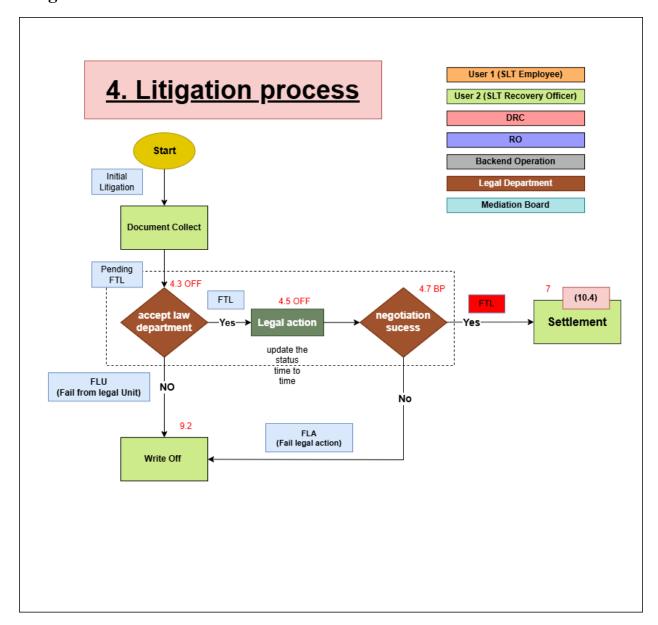


Figure 5: Litigation Process



Dispute Process

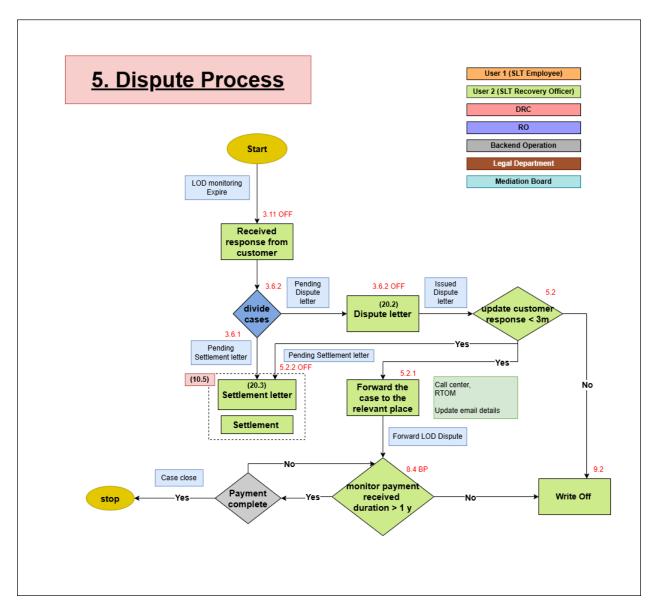


Figure 6: Dispute Process



Settlement Process

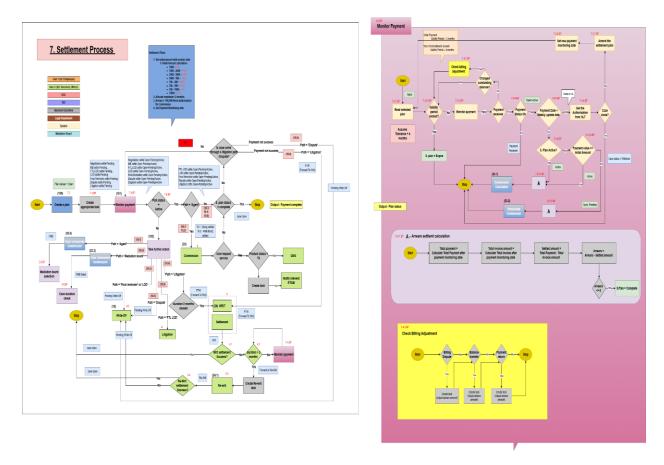


Figure 7.1: Settlement Process



Settlement Process – Monitor Payment

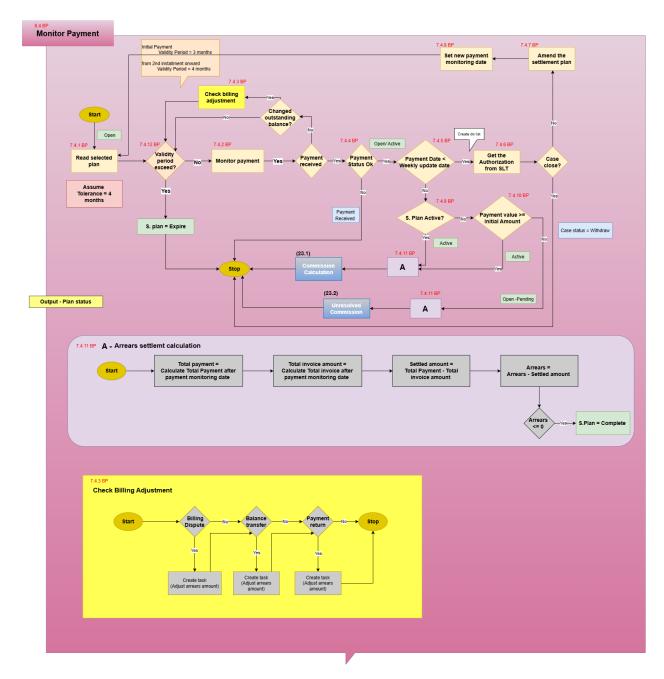


Figure 7.2: Settlement Process_Monitor Payment



Write Off

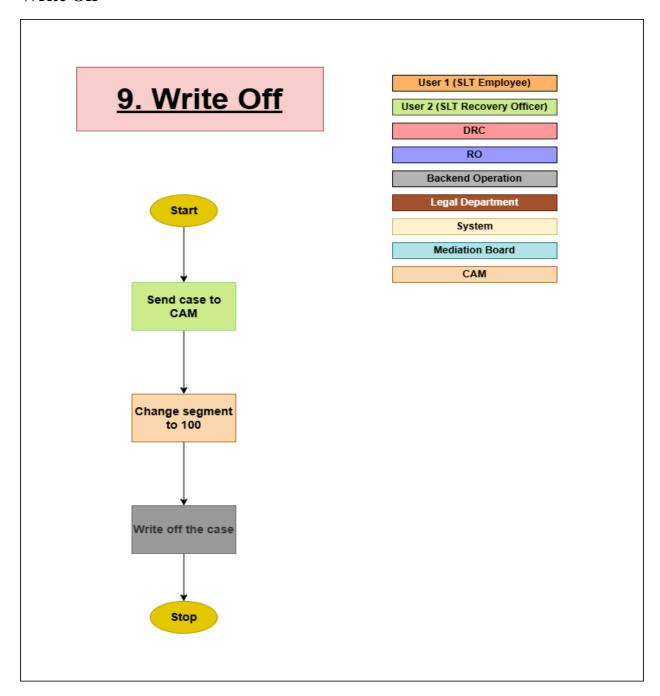


Figure 8: Write Off Process