

LC-BMS User Workflow Documentation

System Overview

The Land Compensation & Beneficiary Management System (LC-BMS) is designed to manage land compensation files through a structured multi-tier approval workflow. This document outlines all user roles and their specific workflows.

User Roles

Technical Registry Officer

TECH_REGISTRY_OFFICER

Data entry, document intake, GIS boundary upload

Accounts Officer

ACCOUNTS

Payment validation, batch creation, reconciliation

Legal Officer

LEGAL

Legal clearance, dispute resolution, injunction management

Land Management Officer (PLO)

PLO

Spatial validation, boundary verification, plot demarcation

Secretary

SECRETARY

Final approval, payment batch authorization

Auditor

AUDITOR

Audit trail review, compliance verification

System Administrator

IT_ADMIN

User management, system configuration

Executive Administrator

ADMIN

Executive oversight, dashboard analytics

Complete Land File Lifecycle

File Creation

(Technical Registry Officer)

Boundary Upload

(Technical Registry Officer)

(GeoJSON)

Auto-triggers

legal_status = 'under_review'

status = 'PENDING_VALIDATION'

MULTI-TIER VALIDATION

(Parallel Review Process)

- ✓ Legal Officer → legal_status
- ✓ PLO → plo_status
- ✓ Secretary → secretary_status

All three must be 'cleared'

VALIDATED

(Auto-set when all cleared)

Payment Batch

(Accounts Officer)

Creation

IN_PAYMENT

PAID

Role-Specific Workflows

1. Technical Registry Officer

Dashboard: Registry Officer Dashboard

Primary Functions:

- Create new land compensation files
- Upload land file documents (Title, LC1 Letter, Valuation Report)
- Upload GIS boundary files (GeoJSON format)
- View and manage file details

Workflow Steps:

1	Click "New File"	Opens creation form
2	Enter landlord details (Name, TIN, NIN, Bank Details)	Validates required fields
3	Enter location (District → County → Subcounty → Parish → Village)	Hierarchical dropdowns
4	Enter valuation amount	Currency formatted input
5	Upload PDF documents	Documents stored and linked
6	Drag & drop GeoJSON boundary file	System parses, validates, and saves to PostGIS
7	Submit	File created with status PENDING_VALIDATION

Automatic System Actions:

- Boundary polygon extracted and stored
- Overlap detection with existing files
- If overlap detected: is_disputed = true, legal_status = 'under_review'
- Area automatically calculated from boundary

2. Legal Officer

Dashboard: Legal Dashboard

Primary Functions:

- Review files for legal compliance
- Clear files for payment processing
- Manage disputes and injunctions
- Flag problematic files

Workflow Steps:

1	View "Pending Review" queue	List of files with legal_status = 'under_review'
2	Select file to review	Opens file detail view
3	Review documents and boundary	Visual verification
4	Check for disputes/overlaps	System shows flagged issues
5a	Clear File	Sets legal_status = 'cleared'
5b	Flag Issue	Sets is_disputed = true with reason
5c	Add Injunction	Sets has_injunction = true

Legal Status Values:

- **under_review** - Awaiting legal review (default)
- **cleared** - Approved for payment processing
- **injunction** - Court order blocking payment

Business Rules:

- Only Legal can set legal_status = 'cleared'
- Files with injunctions cannot proceed to payment
- Boundary overlaps automatically flag files as disputed

3. Land Management Officer (PLO)

Dashboard: PLO Dashboard (Land Management)

Primary Functions:

- Validate spatial data and boundaries
- Verify block and plot accuracy
- Create and manage individual plots
- Clear files after spatial validation

Workflow Steps:

1	Access "File Validation" tab	List of files pending PLO review
2	Select file to validate	Opens validation view with map
3	Verify boundary accuracy on map	Visual and spatial verification
4	Check block/plot information	Cross-reference with survey data
5	Add notes if needed	Optional validation notes
6	Clear File	Sets plo_status = 'cleared'

Additional PLO Functions:

- **Plot Demarcation:** Create individual plots within land file boundaries
- **Boundary Editing:** Correct minor boundary errors
- **Map View:** Full GIS visualization of all blocks and plots

PLO Status Values:

- **pending** - Awaiting PLO review (default)
- **cleared** - Spatial data validated

4. Secretary

Dashboard: Secretary Dashboard

Primary Functions:

- Final approval before payment processing
- Review all clearances (Legal + PLO)
- Authorize payment batches
- Executive oversight

Workflow Steps:

1	Access "Pending Approval" section	Files cleared by Legal and PLO
2	Review file summary	Shows all clearances and notes
3	Verify all documentation complete	System checklist
4	Add approval notes	Optional secretary notes
5	Clear File	Sets secretary_status = 'cleared'

Secretary Status Values:

- **pending** - Awaiting Secretary review (default)
- **cleared** - Final approval granted

Critical: Only after Secretary clears a file does it become VALIDATED and eligible for payment.

5. Accounts Officer

Dashboard: Finance Dashboard

Primary Functions:

- View validated files ready for payment
- Create payment batches
- Upload payment vouchers
- Track payment status and reconciliation

Workflow Steps:

Creating Payment Batch:

1	View "Payment Ready" files	Files where status = 'VALIDATED' and all clearances complete
2	Select files for batch	Multi-select validated files
3	Create payment batch	Generates batch with unique ID
4	Generate payment list	Exportable CSV/PDF
5	Process external payment	Offline bank processing
6	Upload payment voucher	Proof of payment
7	Reconcile payments	Updates paid_amount

Payment Status Values:

- **not_paid** - No payment made
- **partially_paid** - Some payment received
- **fully_paid** - Full valuation amount paid

File Eligibility for Payment:

```
status = 'VALIDATED' AND
legal_status = 'cleared' AND
plo_status = 'cleared' AND
secretary_status = 'cleared' AND
has_injunction = false AND
is_disputed = false
```

6. Auditor

Dashboard: Auditor Dashboard

Primary Functions:

- Review audit logs
- Verify valuation accuracy
- Track system activity
- Compliance verification

Workflow Steps:

1	Access audit logs	Full system activity history
2	Filter by user/action/date	Refined log view
3	Compare valuation to documents	Cross-reference check
4	Review payment reconciliation	Verify payment accuracy
5	Generate compliance reports	Exportable reports

Auditor Capabilities:

- View-only access to all files
- Complete audit trail visibility
- Cannot modify file data

7. System Administrator (IT Admin)

Dashboard: IT Admin Dashboard

Primary Functions:

- User management
- System health monitoring
- Database maintenance
- Access control

Workflow Steps:

1	Manage users	Create/edit/disable user accounts
2	Assign roles	Set user permissions
3	Monitor system logs	Real-time activity feed
4	Database backups	Schedule and manage backups

8. Executive Administrator

Dashboard: Executive Dashboard

Primary Functions:

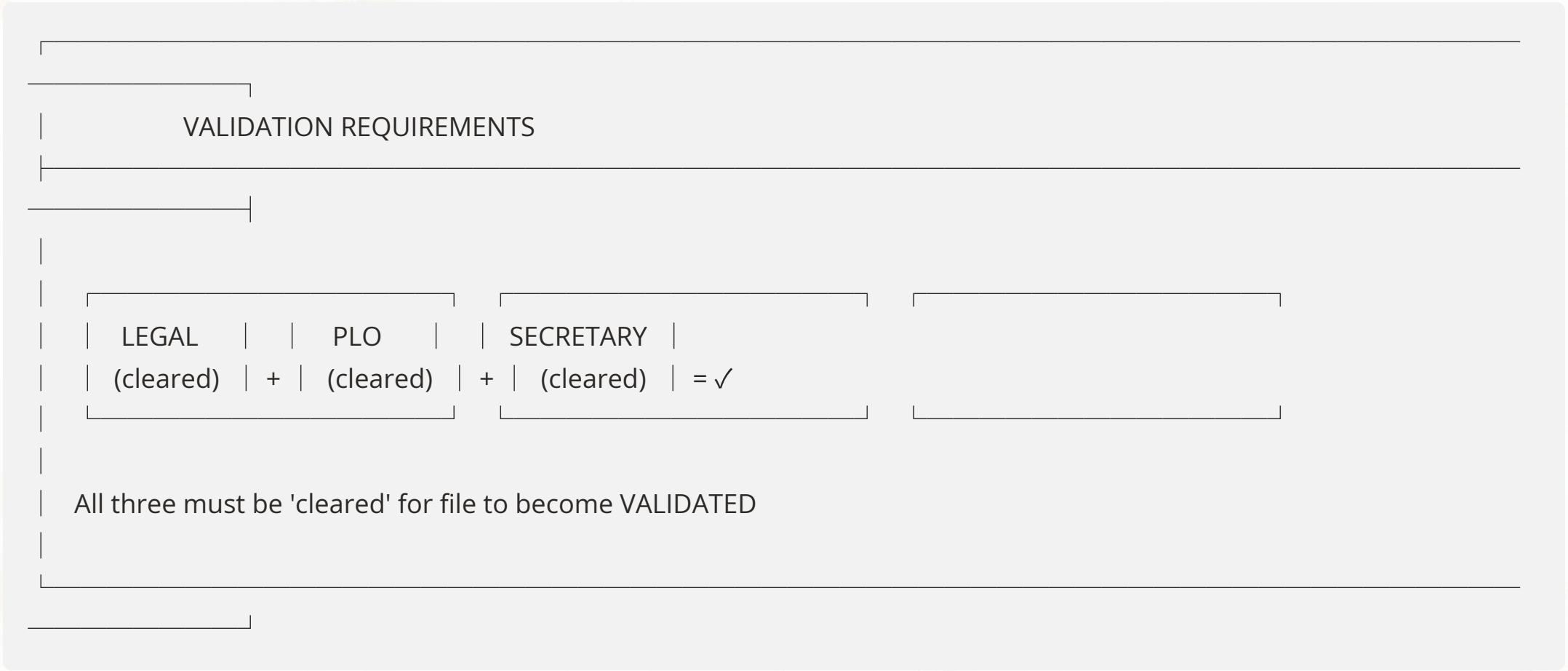
- High-level oversight
- Financial summary views
- Geographic visualization
- Performance metrics

Dashboard Features:

- Total files and valuation overview
- Payment progress tracking
- Interactive map view with all boundaries
- District/county distribution charts

Multi-Tier Validation Flow

The system implements a **three-tier validation** before any file can proceed to payment:



Validation Sequence:

1. File created with boundary → status = 'PENDING_VALIDATION'
2. Legal clears → legal_status = 'cleared'
3. PLO clears → plo_status = 'cleared'
4. Secretary clears → secretary_status = 'cleared'
5. System auto-sets → status = 'VALIDATED'

Note: The order of Legal, PLO, and Secretary clearance is flexible - they can review in parallel.

Status Reference

Finance Status (status field)

Status Description Trigger DRAFT File created, no boundary Initial creation PENDING_VALIDATION Boundary uploaded, awaiting clearances Boundary upload VALIDATED All clearances complete All three cleared IN_PAYMENT Added to payment batch Batch creation PAID Payment completed Payment reconciliation

Legal Status (legal_status field)

Status Description under_review Awaiting legal review cleared Approved by legal injunction Court order in place

PLO Status (plo_status field)

Status Description pending Awaiting PLO review cleared Spatial data validated

Secretary Status (secretary_status field)

Status Description pending Awaiting Secretary approval cleared Final approval granted

Dispute Handling

Automatic Dispute Flagging:

- When a boundary overlaps with an existing file
- System sets is_disputed = true
- legal_status remains under_review

Manual Dispute Resolution (Legal Officer):

1. Review dispute reason
2. Examine overlapping boundaries
3. Determine resolution
4. Either:
    - Clear file and remove dispute flag
    - Add injunction if court order required
    - Leave under review for further investigation

Disputed File Restrictions:

- Cannot be added to payment batch
- Cannot proceed until legal clears
- Visible in Legal Dashboard priority queue

Document Requirements

Each land file requires the following documents:

Document Description Required Title Land title certificate Yes LC1 Letter Local council verification Yes CGV Report Chief Government Valuer report Yes Survey File GeoJSON boundary file Yes Payment Voucher Proof of payment After payment

Summary: Role Permissions Matrix

Action	Registry	Accounts	Legal	PLO	Secretary	Auditor	IT Admin	Executive
Create files	✓							
Upload boundaries	✓							
Upload documents	✓							
Legal clearance			✓					
PLO clearance				✓				
Secretary clearance					✓			
Create payment batch		✓						
Upload vouchers		✓						
Reconcile payments		✓						
View audit logs						✓	✓	
Manage users							✓	
View all dashboards								✓
Create/edit plots				✓				