

JUSTICE CITY LTD – ENTERPRISE MASTER SPEC (v4.0)

Document Type: Integrated Product Requirements & Technical Specification **Product:** JUSTICE CITY LTD – Trust-First Real Estate Marketplace **Version:** 4.0 (Consolidated Baseline) **Date:** 13 January 2026 **Status:** Approved for Final Engineering Handoff

1. Executive Summary

JUSTICE CITY LTD is a trust-first digital real estate marketplace designed to eliminate systemic fraud in emerging markets. By moving away from "cosmetic verification," the platform enforces **Infrastructure Gates**: no user can list, chat, or transact without verified identity and verified property documentation.

Core Value Proposition:

- **Trust-as-a-Service:** Verified People + Verified Properties.
- **Revenue Engine:** 5% Platform Commission + Integrated Professional Services.
- **Tech Stack:** Flutter (Frontend), Supabase (Backend/BaaS), Smile ID (Identity).

2. Strategic Overview

2.1 Problem & Solution

- **Problem:** High fraud rates and unverified "ghost" listings lead to massive financial loss and fragmented transaction cycles.
- **Solution:** A gated ecosystem where verification is the "entry ticket." Secure on-platform communication prevents revenue leakage.

2.2 Target Personas

Persona	Key Interaction	Verification Requirement
Buyer/Renter	Property discovery & secure chat.	Identity (Smile ID).
Verified Agent	Manage listings; earn 5% commission.	Identity + Authorization Letters.
Seller/Owner	Direct property listing.	Identity + Title Deed Proof.
Service Provider	Fulfill Valuation/Survey requests.	Professional Certification.
Admin	Moderation & Transaction Approval.	Full Audit Logging.

3. Marketplace & Revenue Architecture

3.1 Transaction & Commission Logic

The platform enforces a mandatory **5% Commission** on the total value of every closed property transaction.

- **Direct Deal (Buyer ↔ Seller):** 5% platform fee captured.
- **Indirect Deal (via Agent):** 5% platform fee; Agent commission tracked internally in profiles.commission_balance.
- **Leakage Control:** In-app chat masks sensitive contact info (phone/email) until a certain "Interest Level" is achieved.

3.2 Professional Services Module

- Integrated booking for high-intent property services:
- **Property Valuation:** Paid by user; fulfilled by verified Valuers.
 - **Land Surveying:** Paid by user; fulfilled by verified Surveyors.
 - **Monetization:** Platform retains a service handling fee per request.

4. Technical Specification & Data Model

4.1 State Machine: Property Lifecycle

- Properties must follow a strict status flow to ensure quality:
1. **Draft:** Visible only to creator.
 2. **Pending_Docs:** Documents uploaded; awaiting Admin review.
 3. **Published:** Publicly visible (Only after Admin Approval).
 4. **Under_Negotiation:** Linked to an active Chat/Inquiry.
 5. **Closed:** Finalized; Commission ledger entry created.

4.2 Database Schema (Supabase)

profiles Table

Field	Type	Description
id	UUID	Primary Key (Auth.users).
role	Enum	buyer, seller, agent, pro_service, admin.
is_verified	Boolean	The "Trust Gate" flag.
commission_balance	Numeric	Accrued earnings for agents.

properties Table

Field	Type	Description
id	UUID	Primary Key.
status	Enum	draft, pending_docs, published, closed, flagged.
doc_status	Enum	pending, approved, rejected.
title_docs	JSONB	Secure paths to deeds in private storage.

4.3 Row Level Security (RLS)

- **Strict Isolation:** Only verified users (is_verified = true) can access the INSERT operation for properties or messages.
- **Admin Override:** Admins possess a bypass role to view all title_docs for verification purposes.
- **Immutable Ledger:** Transactions can only be INSERTED (not updated or deleted) to maintain an audit trail.

5. Implementation Roadmap (Sprint Plan)

Sprint	Phase	Focus
S1	Foundation	Supabase Auth, RBAC Profile setup, and RLS Hardening.
S2	Trust Gate	Smile ID Integration; Biometric Verification UI.
S3	Listing Engine	Property Lifecycle & Private Document Storage.
S4	Communication	Property-scoped Chat & Leakage Protection.

S5	Services	Professional Service Booking & Admin Queues.
S6	Revenue	Commission Ledger & Closing Logic.

6. Success Metrics (KPIs)

- **Trust:** Fraudulent listing reports < 1% of total inventory.
- **Ops:** Document review SLA < 24 hours.
- **Growth:** 500+ Verified Agents; 5,000+ Verified MAU in Year 1.
- **Efficiency:** Inquiry-to-Transaction conversion rate of > 10%.

7. Future-Ready Architecture (Deferred)

The MVP architecture provides the data hooks for:

- **FinTech:** Escrow (holding funds), Automated Payouts, and Wallets.
- **KYC-Linked Payments:** Validating that the payer is the verified identity.

 **END OF SPECIFICATION**