**Remittance App: Complete Requirements Document**

**Version 2.0** | **Last Updated**: 05/04/2025

**1. Pre-Login Screens**

**1.1 Splash Screen**

**Purpose**: Brand introduction, initial data loading.  
**Flow**:

1. Display app logo, tagline ("Send Money Globally, Fast & Affordable"), and loading animation.
2. **Background Tasks**:
   * Fetch real-time exchange rates (XE API).
   * Check cached user session (if biometrics enabled).
   * Validate app version (force update if outdated).
3. **Redirect Logic**:
   * New user → Onboarding (if onboarding not completed).
   * Returning user → Login (if session exists).
   * KYC-pending user → KYC screen

**UI Elements**:

* Centred logo, progress spinner, tagline.

**Technical Requirements**:

* Offline fallback: Use cached rates if API fails.
* Session timeout: Redirect after 5 seconds if no network.  
  **Compliance**:
* Anonymize IP/user data until login (GDPR).

**1.2 Onboarding Screens**

**Purpose**: Educate users about core features.  
**Flow**:

1. **Carousel Screens (5 slides)**:
   * **Slide 1**: Global transfers (low fees, speed).
   * **Slide 2**: P2P Marketplace (escrow security demo video).
   * **Slide 3**: Multi-Currency Wallets (GBP, NGN).
   * **Slide 4**: Rewards Program (referral bonuses).
   * **Slide 5**: Compliance (KYC/AML explainer).
2. **User Actions**:
   * Swipe left/right or tap "Skip" (saves progress).
   * "Get Started" → Signup/Login.

**UI Elements**:

* Illustrations, "Skip" button (top-right), progress dots.

**Technical Requirements**:

* Track completion status in local storage.

**Localization**:

* Display country-specific examples (e.g., Nigeria flag for NGN users).

**1.3 Login Screen**

**Purpose**: Authenticate users.  
**Flow**:

1. **Input Fields**:
   * Email/phone number.
   * Password (masked).
2. **Features**:
   * Biometric toggle (FaceID/fingerprint).
   * "Forgot Password?" link.

**UI Elements**:

* Error messages: "Invalid email/phone number or password" vs. "Account not found." (red text below fields).
* Loading spinner on submission.

**Security**:

* Rate limiting: Lock account after 5 failed attempts (15-minute cooldown).
* AES-256 encryption for passwords.  
  **Compliance**:
* Session tokens expire after 24 hours.

**1.4 Signup Screen**

**Purpose**: Register new users.  
**Flow**:

1. **Input Fields**:
   * First name, last name (allow special characters for non-Latin names)
   * Email (real-time format validation: RFC 5322 standard).
   * Password (strength meter: 8+ chars, 1 uppercase, 1 symbol/number).
   * Phone number (UK-only, country code selector auto-detected from IP/SIM).
   * Referral code (optional with validation)
2. **Post-Signup**:
   * OTP verification sent to email/phone.
   * OTP auto-read from SMS (Android).
   * "Resend OTP" button (30-second cooldown)
   * Redirect to KYC after verification.

**UI Elements**:

* Tooltips: "Password must include 1 symbol."
* Red error text for invalid inputs.

**Technical Requirements**:

* Country code auto-detection from IP.
* Prevent duplicate accounts (check email/phone).

**Compliance:**

Store consent logs for GDPR ("I agree to Terms & Privacy Policy").

**1.5 Forgot Password Screen**

**Purpose**: Reset user password.  
**Flow**:

1. **Step 1**: Enter email/phone → Send OTP.
2. **Step 2**: Enter OTP (6 digits) → Verify.
3. **Step 3**: Enter new password → Confirm.
4. Force logout of all active sessions post-reset.

**UI Elements**:

* "Resend OTP" button (30-second cooldown).
* "Back to Login" link.

**Security**:

* OTP expiration: 15 minutes.
* HTTPS-only reset links.

**2. Post-Login Screens**

**2.1 KYC Verification Screen**

**Purpose**: Verify user identity for compliance.  
**Flow**:

1. **Document Upload**:
   * Passport, national ID, or utility bill.
   * File validation (PDF/JPEG/PNG, ≤5MB, anti-tampering checks).
2. **Selfie Capture**:
   * Liveness check (blink detection, anti-spoofing).
   * Anti-spoofing: Block static images/screenshots.
3. **Address Verification**:
   * Geolocation match with submitted address.

**UI Elements**:

* Progress tracker ("Step 1/3").
* Camera access prompt.
* Real-time validation feedback ("Document Accepted").

**Technical Requirements**:

* Integration with Jumio (documents) and Onfido (liveness).  
  **Compliance**:
* Store encrypted documents (AWS S3).
* Mandatory for transactions >$500.

**2.2 Home/Dashboard**

**Purpose**: Central hub for transactions and balances.  
**Flow**:

1. **Wallet Balances**:
   * Toggle between GBP/NGN (flags displayed).
   * Real-time balance refresh (every 60 seconds).
2. **Quick Actions**:
   * Send, Request, Add Funds, Exchange (icon-based, tooltips on long-press).
3. **Recent Transactions**:
   * Expandable list (bank logo, date, amount, recipient, status).
   * "View All" → Transaction History.
   * Filter by date/amount/status ("Pending," "Completed," "Failed")

**UI Elements**:

* Notifications bell (red dot for unread).
* Profile avatar (clickable → Account Settings).
* Real-time GBP/NGN rate + 24h change (%).
* Reorder quick actions (drag-and-drop).
* Hide balances (privacy toggle).

**Technical Requirements**:

* Cache exchange rates for offline viewing.

**2.3 Send Money Flow**

**Purpose**: Transfer funds to recipients.  
**Flow**:

1. **Recipient Selection**:
   * Search saved beneficiaries or "Add New."
   * **New Recipient**:
     + Bank name (auto-suggest from API).
     + Account number (instant validation via Modulus Check/Flutterwave).
     + Confirm account number (auto-match).
     + Save beneficiary toggle ("Save for future").
2. **Amount & Fees**:
   * Input amount (sender/receiver view toggle).
   * Fee breakdown (fixed + percentage).
   * Promo code field (apply pre-submit).
3. **Payment Method**:
   * Wallet balance or linked debit card.
   * Add New Card:
     + Card number (auto-format: 4242 4242 4242 4242).
     + Expiry/CVC (auto-advance fields).
     + PCI-DSS compliant storage (tokenization)
4. **Confirmation**:
   * Biometric/PIN verification.
   * Final summary: Amount, fees, total, recipient.
5. **Receipt Screen**:
   * Transaction ID, timestamp, status.
   * Share via PDF/email.
   * "Track Status" → Transaction History (Real time updates e.g., “Processing,” “Completed”).

**Edge Cases**:

* Insufficient funds → "Add Funds" CTA with pre-filled amount.
* Recipient bank offline → Retry button (Retry logic: 3 auto-retries every 5 minutes).

**2.4 Request Money Screen**

**Purpose**: Generate payment requests.  
**Flow**:

1. **Input**:
   * Amount, currency (GBP/NGN).
   * Due date (optional).
   * Custom message (max 140 chars): "Please send £100 by [date]."
2. **Share Options**:
   * SMS, email, WhatsApp (deep link for app users: appname://request/1234).
   * Partial payments allowed (toggle).
   * QR code (scan to pre-fill request)

**Tracking:**

* Status: "Pending," "Partially Paid," "Completed."
* Auto-reminders: 24h before due date.

**Partial Payments:**

* Toggle on/off.
* Progress bar showing paid vs. remaining.

**Technical Requirements**:

* Link expiration: 7 days.
* Auto-reminder at 24h pre-due.

**2.5 Add Funds Screen**

**Purpose**: Top up wallet balance.  
**Flow**:

1. **Currency Selection**: GBP/NGN.
2. **Amount Input**:
   * Minimum/maximum limits (e.g., £10–£10,000).
   * Preset buttons (£50, £100, £500).
3. **Payment Method**:
   * Saved cards or "Add New Debit Card" (Stripe SDK).
4. **Confirmation**:
   * Biometric/PIN verification.
   * Receipt with funding timeline ("Funds available in 1–3 hours")

**Compliance**:

* PCI-DSS compliance for card storage.

**2.6 Currency Exchange Screen**

**Purpose**: Convert between GBP/NGN.  
**Flow**:

1. **Input**:
   * Source/destination currency (swap button).
   * Amount with real-time conversion preview (with "Use Full Balance" toggle).
2. **Rate Comparison**:
   * "Our Rate" vs. "Market Rate."
   * Historical chart (7-day, 1-month, 1-year)
3. **Confirmation**:
   * Lock rate for 60 seconds.
   * Biometric/PIN verification.

**Post-Conversion:**

* Funds credited to target wallet instantly.
* Notification: "£100 converted to ₦150,000."

**UI Elements**:

* Historical rate chart (7-day).

**Technical Requirements**:

* Use mid-market rate + 0.5% margin.

**2.7 P2P Marketplace**

**Purpose**: Peer-to-peer currency exchange.  
**Flow**:

1. **Buy:**

* Filters: Currency pair (GBP/NGN), amount range, seller rating.
* Listings: Seller name, rate, limits ("Seller Limit: £500–£2,000").
* Escrow toggle (default on).

1. **Sell:**

* Set rate (% above/below market rate).
* Publish listing (visible for 24h).

**Transaction Flow:**

* Buyer initiates → Funds held in escrow.
* Seller confirms receipt → Funds released.
* Dispute → Chat + upload evidence (receipts, screenshots).

**Ratings:**

* Post-transaction rating (1–5 stars + comments).

**Escrow Process**:

* + Funds held until both parties confirm.
  + Dispute resolution via chat + evidence upload.

**Compliance**:

* Daily limits: 500(unverified),500(*unverified*),10,000 (verified).

**2.8 Recurring Transfers**

**Purpose**: Schedule repeat transactions.  
**Flow**:

1. **Setup**:
   * Frequency: weekly/monthly custom (e.g., every 2nd Friday).).
   * Start/end dates.
2. **Notifications**:
   * 24h pre-debit reminder.
   * Retry failed payments ×3.
   * Post-debit receipt

**Management:**

* Pause/edit/cancel upcoming transfers.
* History: Log of all recurring transactions.

**Technical Requirements**:

* Cron job for scheduled transfers.

**3. Account Management**

**3.1 Account Profile**

**Purpose**: Manage user details and limits.  
**Flow**:

1. **Profile**:

* **Editable Fields:**
  + Full name, email, phone, address (geolocation auto-fill).
  + Profile photo (upload from gallery/camera).
* **Non-Editable Fields:**
  + DOB, KYC status (green tick/red "Not Verified").

1. **Security**:
   * Change password, reset PIN.
2. **Transaction Limits**:
   * Progress bar (e.g., "500/500/1,000 used").
   * "Increase Limits" → KYC CTA.

**Compliance**:

* Dynamic limits based on KYC tier.

**3.2 Security Settings**

**Purpose**: Configure app security.  
**Flow**:

1. **Toggles**:

* Biometric Login: Enable/disable FaceID/fingerprint.
* 2FA:
  + SMS, authenticator app (TOTP), or hardware key.
  + Backup codes (download/print).
* Session Management:
  + View active devices (IP, location, last active).
  + "Log Out All Devices" button.
* Password:
  + Change password (old + new).
  + Password strength audit ("Last changed 90 days ago").

1. **Reset Security Questions**.
2. **Notifications:**
   * Categories: Transactions, security, promotions.
   * Quiet hours (10 PM – 7 AM).

**3.3 Linked Accounts**

**Purpose**: Manage banks, cards, beneficiaries.  
**Flow**:

* **Bank Accounts:**
  + Add (micro-deposit verification).
  + Remove (confirmation dialog).
* **Cards:**
  + Set default card.
  + Update expiry/CVC.
* **Beneficiaries:**
  + Edit nickname (e.g., "Mum’s Account").
  + Bulk delete (select multiple).

**4. Support & Compliance**

**4.1 In-App Support**

**Features:**

* **Live Chat:**
  + File attachment (PDF, JPEG, PNG).
  + Chat history saved for 90 days.
* **FAQ:**
  + Searchable articles ("How to cancel a transfer?").
  + Video tutorials (embedded YouTube).
* **Callback Request:**
  + Schedule a call with support (calendar integration).

**4.2 Compliance Features**

* **Document Expiry:**
  + Push notification + in-app banner 30 days pre-expiry.
  + One-click re-upload flow.
* **Transaction Limits:**
  + Tier-based (e.g., Tier 1: 500/month, Tier2:500/*month*, *Tier*2:10,000/month post-KYC).
* **Data Export:**
  + Download all data (transactions, KYC docs) in ZIP format.

**5. Technical Requirements**

**5.1 APIs**

* **Core:**
  + Payments: Stripe (cards), Flutterwave (bank transfers).
  + KYC: Jumio (documents), Onfido (liveness).
  + Fraud: Sift (real-time scoring).
* **Fallbacks:**
  + Exchange rates: Primary (XE) → Backup (Open Exchange Rates).

**5.2 Security**

* **Encryption:**
  + TLS 1.3 (in transit).
  + AES-256 (at rest).
* **Penetration Testing:**
  + Quarterly audits by third-party (e.g., HackerOne).

**5.3 Performance**

* **Latency:**
  + API response <1s (95th percentile).
  + Transaction processing <3s.
* **Scalability:**
  + Horizontal scaling (Kubernetes).
  + Database sharding (user ID-based).

**6. Edge Cases & Testing**

**6.1 Error Handling**

* **Network Failure:**
  + "Retry" button with exponential backoff.
  + Offline draft saving (SQLite).
* **Bank API Downtime:**
  + Graceful degradation: "This bank is offline. Try another?"

**6.2 Accessibility**

* **Screen Readers:**
  + VoiceOver/TalkBack support for all UI elements.
  + ARIA labels for icons.
* **Navigation:**
  + Keyboard shortcuts (web): Tab to navigate, Enter to select.
  + Voice commands (Android/iOS).

**7. Testing & Deployment**

**7.1 Test Cases**

* **Critical Paths**:
  + Send money (success/failure).
  + KYC submission.
* **Edge Cases**:
  + OTP expiration.
  + Network failure during payment.

**7.2 Deployment**

* **Phases**:
  1. Alpha (internal).
  2. Beta (1k users).
  3. GA (public).
* **Regions**: UK → Nigeria → EU.

**7. Compliance Checklist**

**Requirement Implementation**

**GDPR** - Right to erasure button in settings.

**PSD2/SCA** - Biometric + 2FA for EU transfers >€30.

**CBN (Nigeria)** - BVN validation for NGN wallets.

**WCAG 2.1** - Contrast ratio ≥ 4.5:1 for all text.

**8. Appendices**

* **Mockups**: [Figma Link].
* **API Docs**: [Swagger Link].
* **Compliance Certificates**: [FCA, CBN Licenses]