Epics for the Administration Role

**Epic 1: Administrator Registration & Validation**

**User Story**:  
As an **Administrator**, I need a **secure registration process** that requires invitation-based access and multi-step verification so that unauthorized users cannot gain administrative privileges.

**Acceptance Criteria:**

✅ Administrators can only register via an **invite link** sent by a **Super Administrator**.  
✅ Registration requires **email verification and phone number validation** (via Firebase OTP).  
✅ Passwords must meet **strong security criteria** (min 8 characters, special character, number, etc.).  
✅ New Administrator accounts require **manual approval** before accessing the system.  
✅ **Multi-Factor Authentication (MFA)** must be set up before first login.

**Epic 2: Secure Administrator Login with Multi-Factor Authentication (MFA)**

**User Story**:  
As an **Administrator**, I need a **separate login portal** with **enhanced security features** so that my account is protected from unauthorized access.

**Acceptance Criteria:**

✅ Administrators login via a **dedicated admin portal** (/admin-login).  
✅ The system requires **email/password authentication** via Firebase Admin Authentication.  
✅ **Multi-Factor Authentication (MFA)** is required for all logins via **OTP** (SMS or Authenticator app).  
✅ **IP Whitelisting (Optional)** allows only approved networks to access the admin panel.  
✅ **Session Timeout** auto-logs out inactive admins.

**Epic 3: Administrator Role & Permissions Management**

**User Story**:  
As a **Super Administrator**, I need to **assign and manage different types of administrators** with role-based access control (RBAC) so that each administrator only has access to relevant functions.

**Acceptance Criteria:**

✅ **Super Administrator** can create, modify, and deactivate admin accounts.  
✅ Different roles include:

* **Super Administrator** – Full control over the platform.
* **Financial Administrator** – Manages payouts and financial transactions.
* **Operations Administrator** – Handles bookings, user activity, and compliance.
* **Support Administrator** – Manages disputes, refunds, and user requests.  
  ✅ Each admin role has **restricted access** to certain platform features.  
  ✅ **Audit Logs** record all administrative actions.

**Epic 4: Platform Administration & Monitoring**

**User Story**:  
As an **Administrator**, I need access to **real-time monitoring dashboards** and system logs so that I can oversee operations and detect potential issues.

**Acceptance Criteria:**

✅ Admin Dashboard displays **key platform metrics** (Bookings, Transactions, Users).  
✅ Admins receive **alerts for system errors, security threats, or transaction failures**.  
✅ Admins can generate **activity reports** for business intelligence.  
✅ The system logs **all actions performed by administrators**.

**Epic 5: Payout Management for Producers and Partners**

**User Story**:  
As an **Administrator**, I need to **process and verify payouts** to **Producers (Yacht Owners, Water Sports Facilitators, Chefs, Tour Operators, etc.)** and **Partners (Hotels, Travel Platforms, etc.)** so that they receive correct payments for their services.

**Acceptance Criteria:**

✅ The system automatically **calculates earnings** for completed bookings.  
✅ The Administrator can **review, approve, and process payouts** securely.  
✅ Failed or disputed payouts are **flagged for manual review**.  
✅ A **financial reconciliation report** tracks all transactions.

**Epic 6: Compliance & Financial Security**

**User Story**:  
As an **Administrator**, I need to **ensure compliance with financial regulations, tax policies, and security standards** so that transactions are legally and securely executed.

**Acceptance Criteria:**

✅ The platform applies **automatic tax calculations** based on region.  
✅ **GDPR & Payment Security (PCI-DSS)** compliance is enforced.  
✅ The system **flags and blocks suspicious transactions**.  
✅ A **compliance audit log** records all financial activities.

**Epic 7: Customer & Partner Support**

**User Story**:  
As an **Administrator**, I need to **handle customer issues, refunds, and partner disputes** so that all parties are satisfied and the platform maintains its reputation.

**Acceptance Criteria:**

✅ The Administrator can **view and manage customer support tickets**.  
✅ The Administrator can **initiate refunds** and resolve complaints.  
✅ All interactions and resolutions are **logged for auditing**.

**Next Steps**

1. **Develop the Firebase-based Admin Authentication System** (including invite-only registration & MFA).
2. **Implement the Admin Dashboard UI** with **role-based access**.
3. **Integrate Firebase Firestore for Secure Data Storage**.
4. **Enable Automated & Manual Payout Workflows**.
5. **Set Up Logging & Monitoring Tools** for security compliance.

Would you like any additional admin functionalities, such as **bulk payout processing, AI fraud detection, or admin-level analytics**?