

Complete API Endpoints for SabiLens

1. Authentication Endpoints

Public Auth

- POST /api/auth/register - Register new user (consumer/company/nafdac)
- POST /api/auth/login - Login with email/phone & password
- POST /api/auth/logout - Logout user
- POST /api/auth/refresh-token - Refresh access token
- POST /api/auth/forgot-password - Request password reset
- POST /api/auth/reset-password - Reset password with token
- POST /api/auth/verify-email - Verify email address
- POST /api/auth/verify-phone - Verify phone with OTP
- POST /api/auth/resend-otp - Resend verification OTP

2. Consumer Endpoints

Profile Management

- GET /api/consumer/profile - Get consumer profile
- PUT /api/consumer/profile - Update consumer profile
- PATCH /api/consumer/profile/avatar - Upload/update profile picture
- DELETE /api/consumer/profile - Delete consumer account
- GET /api/consumer/stats - Get consumer stats (reports, scans)

Scan History

- GET /api/consumer/scans - Get all scan history (paginated)
- GET /api/consumer/scans/recent - Get recent scans (for home page)
- GET /api/consumer/scans/:scanId - Get specific scan details
- DELETE /api/consumer/scans/clear - Clear all scan history
- DELETE /api/consumer/scans/:scanId - Delete specific scan
- GET /api/consumer/scans/filter - Filter scans (by status/date)
- GET /api/consumer/scans/stats - Get scan statistics

Product Scanning

- POST /api/consumer/scan - Submit new product scan
- POST /api/consumer/scan/upload - Upload product images
- POST /api/consumer/scan/analyze - AI analysis of scanned product
- GET /api/consumer/scan/result/:scanId - Get scan result
- POST /api/consumer/scan/confirm - Confirm scan result accuracy

Reporting

- POST /api/consumer/reports - Submit counterfeit report
- POST /api/consumer/reports/upload - Upload receipt/evidence
- GET /api/consumer/reports/:reportId - Get report status
- PUT /api/consumer/reports/:reportId - Update report
- DELETE /api/consumer/reports/:reportId - Withdraw report
- GET /api/consumer/reports/history - Get user's report history

Notifications

- GET /api/consumer/notifications - Get all notifications
- PATCH /api/consumer/notifications/read - Mark notifications as read
- DELETE /api/consumer/notifications/:id - Delete notification
- GET /api/consumer/notifications/settings - Get notification preferences
- PUT /api/consumer/notifications/settings - Update notification preferences

Settings & Preferences

- GET /api/consumer/settings - Get all settings
- PUT /api/consumer/settings/language - Update preferred language
- PUT /api/consumer/settings/location - Update location preferences
- PUT /api/consumer/settings/privacy - Update privacy settings
- GET /api/consumer/settings/data - Request data export
- DELETE /api/consumer/settings/data - Delete user data

3. Company Endpoints

Authentication & Registration

POST	/api/company/register	- Register new company
POST	/api/company/login	- Company login
POST	/api/company/verify	- Verify company (NAFDAC only)
GET	/api/company/status	- Get registration status
POST	/api/company/resend-verification	- Resend verification email

Company Profile

GET	/api/company/profile	- Get company profile
PUT	/api/company/profile	- Update company details
PATCH	/api/company/profile/logo	- Upload company logo
GET	/api/company/team	- Get team members
POST	/api/company/team	- Invite team member
PUT	/api/company/team/:userId	- Update team member role
DELETE	/api/company/team/:userId	- Remove team member
GET	/api/company/billing	- Get billing info
PUT	/api/company/billing	- Update billing info
GET	/api/company/subscription	- Get subscription details
PUT	/api/company/subscription	- Update subscription

Dashboard & Analytics

GET	/api/company/dashboard	- Get dashboard overview
GET	/api/company/dashboard/kpi	- Get KPI cards data
GET	/api/company/dashboard/trends	- Get trend chart data
GET	/api/company/dashboard/states	- Get top states chart data
GET	/api/company/dashboard/recent-alerts	- Get recent alerts
GET	/api/company/dashboard/quick-stats	- Get quick statistics

Product Registry

GET /api/company/products - Get all registered products
GET /api/company/products/:productId - Get specific product
POST /api/company/products - Register new product
PUT /api/company/products/:productId - Update product
DELETE /api/company/products/:productId - Delete product
POST /api/company/products/upload - Upload product artwork
GET /api/company/products/categories - Get product categories
GET /api/company/products/stats - Get product statistics

Reports & Alerts

GET /api/company/reports - Get all reports (paginated)
GET /api/company/reports/:reportId - Get specific report
GET /api/company/reports/filter - Filter reports
GET /api/company/reports/stats - Get report statistics
PATCH /api/company/reports/:reportId/status - Update report status
POST /api/company/reports/export - Export reports (CSV/PDF)
GET /api/company/alerts - Get all alerts
PATCH /api/company/alerts/:alertId/read - Mark alert as read
PATCH /api/company/alerts/read-all - Mark all alerts as read

Evidence Vault

GET /api/company/evidence - Get all evidence cases
GET /api/company/evidence/:caseId - Get specific case
GET /api/company/evidence/:caseId/files - Get case files
POST /api/company/evidence/:caseId/download - Download case files
POST /api/company/evidence/:caseId/zip - Create ZIP bundle
GET /api/company/evidence/stats - Get evidence statistics

Heat Map

GET	/api/company/heatmap	- Get heat map data
GET	/api/company/heatmap/regions	- Get region data
GET	/api/company/heatmap/coordinates	- Get GPS coordinates
GET	/api/company/heatmap/filter	- Filter heat map
GET	/api/company/heatmap/export	- Export map data

Settings

GET	/api/company/settings	- Get all settings
PUT	/api/company/settings/notifications	- Update notification prefs
PUT	/api/company/settings/security	- Update security settings
PUT	/api/company/settings/api	- Update API settings
GET	/api/company/settings/api-keys	- Get API keys
POST	/api/company/settings/api-keys	- Generate new API key
DELETE	/api/company/settings/api-keys/:keyId	- Revoke API key
PUT	/api/company/settings/webhooks	- Update webhook URLs
POST	/api/company/settings/test-webhook	- Test webhook
DELETE	/api/company/settings/account	- Delete company account

4. NAFDAC Endpoints

Authentication & User Management

POST	/api/nafdac/login	- NAFDAC officer login
POST	/api/nafdac/officers	- Create new officer (admin only)
GET	/api/nafdac/officers	- Get all officers
PUT	/api/nafdac/officers/:officerId	- Update officer
DELETE	/api/nafdac/officers/:officerId	- Delete officer
GET	/api/nafdac/permissions	- Get role permissions
PUT	/api/nafdac/permissions/:role	- Update permissions

Company Management

GET /api/nafdac/companies - Get all registered companies
GET /api/nafdac/companies/pending - Get pending verifications
GET /api/nafdac/companies/:companyId - Get company details
POST /api/nafdac/companies/:companyId/verify - Verify company
POST /api/nafdac/companies/:companyId/reject - Reject company
PUT /api/nafdac/companies/:companyId/suspend - Suspend company
PUT /api/nafdac/companies/:companyId/activate - Activate company
DELETE /api/nafdac/companies/:companyId - Delete company
GET /api/nafdac/companies/stats - Get company statistics

National Dashboard

GET /api/nafdac/dashboard - Get national dashboard
GET /api/nafdac/dashboard/stats - Get main stats
GET /api/nafdac/dashboard/heatmap - Get national heat map
GET /api/nafdac/dashboard/live-alerts - Get live alert feed
GET /api/nafdac/dashboard/regions - Get region breakdown
GET /api/nafdac/dashboard/trends - Get national trends

Alerts Management

GET /api/nafdac/alerts - Get all alerts
GET /api/nafdac/alerts/critical - Get critical alerts
GET /api/nafdac/alerts/:alertId - Get specific alert
PATCH /api/nafdac/alerts/:alertId/acknowledge - Acknowledge alert
PATCH /api/nafdac/alerts/:alertId/resolve - Resolve alert
POST /api/nafdac/alerts/bulk-acknowledge - Acknowledge multiple alerts
GET /api/nafdac/alerts/stats - Get alert statistics
GET /api/nafdac/alerts/export - Export alerts data

Cases & Evidence

GET	/api/nafdac/cases	- Get all evidence cases
GET	/api/nafdac/cases/:caseId	- Get case details
GET	/api/nafdac/cases/:caseId/evidence	- Get case evidence
POST	/api/nafdac/cases/:caseId/assign	- Assign to officer
POST	/api/nafdac/cases/:caseId/update-status	- Update case status
POST	/api/nafdac/cases/export	- Export case bundle
GET	/api/nafdac/cases/stats	- Get case statistics
GET	/api/nafdac/cases/search	- Search cases

Vendor Tracking

GET	/api/nafdac/vendors	- Get all vendors
GET	/api/nafdac/vendors/high-risk	- Get high-risk vendors
GET	/api/nafdac/vendors/recurring	- Get recurring offenders
GET	/api/nafdac/vendors/:vendorId	- Get vendor details
POST	/api/nafdac/vendors/:vendorId/blacklist	- Blacklist vendor
POST	/api/nafdac/vendors/:vendorId/investigate	- Mark for investigation
GET	/api/nafdac/vendors/export	- Export vendor data
GET	/api/nafdac/vendors/stats	- Get vendor statistics

Analytics & Reports

GET	/api/nafdac/analytics/categories	- Get category analytics
GET	/api/nafdac/analytics/trends	- Get trend comparison
GET	/api/nafdac/analytics/regions	- Get region analytics
GET	/api/nafdac/analytics/timeline	- Get timeline data
POST	/api/nafdac/analytics/export	- Export analytics report
GET	/api/nafdac/analytics/predictions	- Get AI predictions
GET	/api/nafdac/analytics/hotspots	- Get counterfeit hotspots

Export Data

GET	/api/nafdac/export	- Get export options
POST	/api/nafdac/export/reports	- Export reports data
POST	/api/nafdac/export/cases	- Export cases data
POST	/api/nafdac/export/vendors	- Export vendors data
POST	/api/nafdac/export/analytics	- Export analytics data
GET	/api/nafdac/export/history	- Get export history
GET	/api/nafdac/export/download/:exportId	- Download exported file

Enforcement Actions

POST	/api/nafdac/enforcement/raids	- Schedule raid
GET	/api/nafdac/enforcement/raids	- Get scheduled raids
PUT	/api/nafdac/enforcement/raids/:raidId	- Update raid
POST	/api/nafdac/enforcement/notices	- Issue warning notice
GET	/api/nafdac/enforcement/history	- Get enforcement history
POST	/api/nafdac/enforcement/seizures	- Log product seizure

Notifications & Communications

GET	/api/nafdac/notifications	- Get notifications
POST	/api/nafdac/notifications/broadcast	- Broadcast to all companies
POST	/api/nafdac/notifications/company/:companyId	- Send to specific company
GET	/api/nafdac/notifications/settings	- Get notification settings
PUT	/api/nafdac/notifications/settings	- Update notification settings

Settings & Configuration

GET	/api/nafdac/settings	- Get system settings
PUT	/api/nafdac/settings	- Update system settings
GET	/api/nafdac/settings/risk-levels	- Get risk level config
PUT	/api/nafdac/settings/risk-levels	- Update risk levels
GET	/api/nafdac/settings/categories	- Get product categories
POST	/api/nafdac/settings/categories	- Add category
PUT	/api/nafdac/settings/categories/:categoryId	- Update category
DELETE	/api/nafdac/settings/categories/:categoryId	- Delete category
GET	/api/nafdac/settings/audit-logs	- Get audit logs

5. Shared/Common Endpoints

Product Verification

GET	/api/verify/nafdac/:number	- Verify NAFDAC number
GET	/api/verify/batch/:number	- Verify batch number
POST	/api/verify/image	- Verify product by image
GET	/api/verify/product/:productId	- Get product details

Location Services

GET	/api/location/states	- Get all Nigerian states
GET	/api/location/cities/:state	- Get cities by state
POST	/api/location/reverse-geocode	- Get location from GPS

File Upload

POST	/api/upload/image	- Upload single image
POST	/api/upload/images	- Upload multiple images
POST	/api/upload/receipt	- Upload receipt
DELETE	/api/upload/:fileId	- Delete uploaded file

Notifications (Real-time via WebSocket)

WS	/ws/notifications	- WebSocket connection
WS	/ws/company/:companyId	- Company-specific socket
WS	/ws/nafdac	- NAFDAC-specific socket

Response Formats

Success Response

```
``json
{
  "success": true,
  "data": {},
  "message": "Operation successful",
  "timestamp": "2024-01-15T14:30:00Z"
}
```

Error Response

```
```json
{
 "success": false,
 "error": {
 "code": "ERROR_CODE",
 "message": "Error description",
 "details": {}
 },
 "timestamp": "2024-01-15T14:30:00Z"
}
```
```

Paginated Response

```
```json
{
 "success": true,
 "data": [],
 "pagination": {
 "page": 1,
 "limit": 20,
 "total": 100,
 "pages": 5
 }
}
```