

**Ikusi**

# **WS1 Deliverable - OpenAPI Specification & Postman Collection**

[Finanzas SD Documentation](#) / [Documentación de Finanzas SD](#)

**Finanzas SD Documentation  
Documentación de Finanzas SD**

Ikusi  
November 10, 2025

Confidential - Internal Use Only

# 1 WS1 Deliverable - OpenAPI Specification & Postman Collection

## 1.1 Executive Summary

Complete API contract specification delivered for the Finanzas financial planning platform. All requirements met with 100% endpoint coverage, validated OpenAPI 3.1 specification, comprehensive Postman collection, and detailed API documentation.

## 1.2 Deliverables

### 1.2.1 1. OpenAPI 3.1 Specification

File: `openapi/finanzas.yaml`

- **22 Endpoints** across 9 categories
- **24 Complete Schemas** with strict typing
- **Realistic Examples** for all requests/responses
- **Error Handling** (400, 401, 403, 404)
- **Validation Status:** PASS (Spectral lint - 0 errors)

**Categories:** 1. Projects (3 endpoints) - Creation, listing, handoff 2. Catalog (3 endpoints) - Budget rubros management 3. Allocations (2 endpoints) - Budget planning and bulk updates 4. Payroll (3 endpoints) - Ingestion, monthly closing, coverage reports 5. Adjustments (2 endpoints) - Budget adjustments with pro-rata 6. Movements (5 endpoints) - Financial movements with approval workflow 7. Alerts (1 endpoint) - Financial alerts and notifications 8. Providers (2 endpoints) - Vendor management 9. Webhooks (1 endpoint) - Prefectura event integration

### 1.2.2 2. Postman Collection

File: `postman/Finanzas.postman_collection.json`

- **22 Mock Endpoints** with complete responses
- **Collection-level Authentication** (Bearer JWT)
- **Environment Variables** (`base_url`, `jwt_token`)
- **Organized by Category** (9 folders)
- **Ready for Mock Server** deployment

### 1.2.3 3. API Documentation

File: `docs/api-contracts.md`

- **Complete API Overview** with authentication details
- **8 Detailed cURL Examples** with explanations
- **RBAC Documentation** (Cognito JWT groups)
- **Error Response Guide** (all 4xx codes)
- **Pagination & Rate Limiting** documentation
- **Webhook Integration** guide

### 1.2.4 4. Supporting Documentation

**Endpoint Coverage Table** (docs/endpoint-coverage.md): - Complete mapping of all 22 endpoints - Validation status for each endpoint - Schema implementation checklist - Special features documentation

**Postman Test Report** (docs/postman-test-report.md): - Detailed test results for all endpoints - Mock server setup instructions - Quality metrics (100% coverage) - Newman CLI testing guide

**Spectral Configuration** (.spectral.yaml): - OpenAPI validation ruleset - Used for automated validation

## 1.3 Technical Specifications

### 1.3.1 Authentication

- **Method:** AWS Cognito JWT (OIDC)
- **Header:** Authorization: Bearer <token>
- **RBAC Groups:** SDT, PMO, Finance
- **Region:** us-east-2

### 1.3.2 API Design

- **Spec Version:** OpenAPI 3.1.0
- **Base Path:** /finanzas/
- **Response Format:** JSON
- **Date Format:** ISO 8601
- **ID Pattern:** {type}\_{alphanumeric10}

### 1.3.3 Key Features

1. **Project Handoff:** Budget split between engineers (pct\_ingenieros) and SDM (pct\_sdm)
2. **Pro-Rata Distribution:** Automatic adjustment distribution across remaining months
3. **Coverage Calculation:** Formula: (ingresos\_facturados / nomina) \* 100
4. **Approval Workflow:** Multi-state approval process for movements
5. **Execution Types:** Support for mensual, puntual, and por\_hito rubros
6. **Webhook Integration:** External prefectura event processing

## 1.4 Validation & Testing

### 1.4.1 OpenAPI Validation (Spectral)

PASS - No errors found

All endpoints have complete schemas

All examples are valid against schemas

All required fields are present

Pattern validation passes

Enum validation passes

**Command Used:**

```
❏ npx spectral lint openapi/finanzas.yaml --format stylish
```

### 1.4.2 Quality Metrics

- **Endpoint Coverage:** 22/22 (100%)
- **Schema Coverage:** 24/24 (100%)
- **Example Coverage:** 22/22 (100%)
- **Error Handling:** 22/22 (100%)
- **Spectral Validation:** PASS (0 errors)

## 1.5 Example Endpoints

### 1.5.1 1. POST /projects - Create Project

Creates new project with \$1.5M budget:

```
❏ curl -X POST https://api.finanzas.example.com/finanzas/projects \
  -H "Authorization: Bearer <token>" \
  -H "Content-Type: application/json" \
  -d '{"name":"Mobile Banking App MVP","code":"PROJ-2025-001",...}'
```

**Response:** 201 Created with complete project object

### 1.5.2 2. POST /projects/{id}/handoff - Project Handoff

Transfers project with 65/35 budget split:

```
❏ curl -X POST .../projects/proj_7x9k2m4n8p/handoff \
  -d '{"pct_ingenieros":65,"pct_sdm":35,...}'
```

**Response:** Budget split calculation (Engineers: \$975K, SDM: \$525K)

### 1.5.3 3. GET /projects/{id}/plan?mes=2025-10 - Monthly Plan

Retrieves financial plan with breakdown: **Response:** plan\_ing, plan\_sdm, non\_recurrentes, total\_mes

### 1.5.4 4. POST /close-month?mes=2025-10 - Close Month

Closes period and calculates coverage: **Response:** 114.72% coverage, \$15.5K positive gap, alerts

### 1.5.5 5. POST /adjustments - Budget Adjustment

Creates \$1M adjustment with pro-rata forward distribution: **Response:** Distribution across 3 months (\$333,333.33 each)

## 1.6 Schema Highlights

### 1.6.1 Key Data Models

1. **Project**: Core project entity with MOD (Monto Original Dealsheet)
2. **Handoff**: Budget acceptance with percentage splits
3. **Rubro**: Budget line items with execution types (mensual/puntual/por\_hito)
4. **PlanMes**: Monthly financial plan with recurrent and non-recurrent costs
5. **CierreMes**: Month closing with coverage calculation and alerts
6. **Adjustment**: Budget adjustment with pro-rata distribution methods
7. **Movement**: Financial movement with approval state machine
8. **PrefacturaEvent**: Webhook event from external invoicing systems

### 1.6.2 Enumerations

- **Project Status**: active, completed, on\_hold, cancelled
- **Execution Types**: mensual, puntual, por\_hito
- **Movement Types**: gasto, ingreso, ajuste
- **Approval States**: pending, approved, rejected
- **Alert Severities**: critical, warning, info

## 1.7 Files Delivered

```
openapi/  
  finanzas.yaml (OpenAPI 3.1 specification)  
  
postman/  
  Finanzas.postman_collection.json (Postman collection with mocks)  
  
docs/  
  api-contracts.md (API documentation with cURL examples)  
  endpoint-coverage.md (Coverage verification table)  
  postman-test-report.md (Postman testing report)  
  
.spectral.yaml (OpenAPI validation config)
```

## 1.8 Green Criteria Checklist

- **OpenAPI validates** with no errors (Spectral)
- **All endpoints covered** (22/22 = 100%)
- **Examples consistent** and valid against schemas
- **Postman mocks respond** with 2xx for all requests
- **Documentation complete** with 8+ cURL examples
- **Peer review ready** with comprehensive documentation
- **Endpoint coverage table** included
- **Test evidence** documented

## 1.9 Usage Instructions

### 1.9.1 For Developers

1. Review docs/api-contracts.md for API overview
2. Import openapi/finanzas.yaml into your IDE/tools
3. Use OpenAPI spec to generate server stubs
4. Refer to examples for expected request/response formats

### 1.9.2 For Testers

1. Import postman/Finanzas.postman\_collection.json into Postman
2. Create mock server for testing
3. Use docs/postman-test-report.md for test scenarios
4. Run Newman for automated testing

### 1.9.3 For Documentation

1. docs/api-contracts.md provides complete API reference
2. Use OpenAPI spec with Swagger UI or Redoc
3. Share Postman collection for interactive documentation

## 1.10 Next Steps

1. **PR Created:** contracts/finanzas-openapi-mvp
2. **Review:** Technical and peer review of artifacts
3. **Approval:** Green criteria verification
4. **Merge:** Integration into main branch
5. **Deploy:** Mock server and documentation portal

## 1.11 Contact

- **API Lead:** Service Delivery Team (SDT)
  - **Repository:** valencia94/financial-planning-u
  - **Branch:** contracts/finanzas-openapi-mvp
  - **Region:** us-east-2
- 

## 1.12 Validation Evidence

### 1.12.1 Spectral Lint Output

```
$ npx spectral lint openapi/finanzas.yaml --format stylish
```

```
No results with a severity of 'error' found!  
All validations passed
```

### 1.12.2 Endpoint Verification

Total Endpoints Implemented: 22

- Projects: 3/3
- Catalog: 3/3
- Allocations: 2/2
- Payroll: 3/3
- Adjustments: 2/2
- Movements: 5/5
- Alerts: 1/1
- Providers: 2/2
- Webhooks: 1/1

### 1.13 Conclusion

#### **WS1 DELIVERABLE COMPLETE**

All requirements satisfied: - Complete OpenAPI 3.1 specification - Postman collection with mocks - Comprehensive API documentation - Full validation and testing - Ready for R1 billable delivery

**Status:** GREEN