

Regulatory Package Manager: Executive Summary

A Maven-based system for managing regulatory documents as versioned packages

The Problem

Financial institutions struggle to maintain current regulatory documentation across multiple jurisdictions. Current approaches involve manual document collection, no version control, difficulty tracking amendments, impossible gap analysis, and each RegTech vendor re-analyzing the same regulations independently.

Result: High compliance costs, fragmented solutions, and risk of using outdated regulations.

The Solution: Regulatory Package Manager

Apply proven software package management patterns (Maven) to regulatory documents. Each regulation becomes a versioned artifact with dependencies, checksums, and metadata.

Core Innovation: Bill of Materials (BOM)

A "regime package" (e.g., EMIR 2024.11.0) includes: Base law, Technical Standards (RTS, ITS), Implementation artifacts (XML schemas, validation rules), with all dependencies automatically resolved.

```
eu.regulation.emir:law-648-2012:2024.01.09:pdf  
eu.regulation:emir-bom:2024.11.0:pom
```

Key Capabilities

Document Management: Version control, transitive dependency resolution, integrity checking (SHA-256), gap analysis.

Analysis Services: Obligation extraction, CDE mapping to CPMI-IOSCO standards, ISO 20022 integration, cross-regime impact analysis.

Integration: MCP Server for LLM agents, REST API, CLI, Git workflow with PR approvals.

Technical Architecture

5-Stage Pipeline: (1) Document Ingestion (PDF parsing, OCR), (2) Structural Analysis (article detection), (3) Semantic Extraction (obligations), (4) Enrichment (CDE/ISO mapping), (5) Publication (Maven artifacts).

Tier	Content	Access	Revenue
Public	Raw regulatory PDFs	Free	Lead generation
Premium	Structured obligations, CDE mappings	Subscription	Primary revenue
Enterprise	Client-specific analysis, custom BOMs	Custom pricing	High-margin

Commercial Model

Year	Premium Clients	Enterprise Clients	Total Revenue
Year 1	$20 \times \$30K = \$600K$	$2 \times \$200K = \$400K$	\$1.0M
Year 2	$100 \times \$30K = \$3.0M$	$10 \times \$200K = \$2.0M$	\$5.0M
Year 3	$500 \times \$30K = \$15.0M$	$25 \times \$200K = \$5.0M$	\$20.0M

Investment Required

Development: \$216K (6 FTE \times 8 weeks \times \$4.5K/week) - Backend engineers, data engineer, regulatory analyst, frontend engineer, DevOps engineer.

Infrastructure Year 1: \$0 (Nexus OSS, cloud-hosted Neo4j free tier, existing AWS)

Total Initial Investment: \$216K for 8-week MVP | **ROI:** 4.6x Year 1, 23x Year 3

Competitive Advantages

- vs. Manual Management:** Automated updates, dependency awareness, systematic gap analysis.
- vs. Existing RegTech:** Open architecture, standard Maven tooling, composable services, multi-tenant (analyze once, serve many).
- vs. Building In-House:** Network effects, continuous professional updates, pre-analyzed obligations.

Implementation Timeline (8-Week MVP)

Weeks	Milestone	Deliverables
1-2	Foundation	Nexus setup, Maven coordinates, first BOM (EMIR)
3-4	Document Ingestion	PDF pipeline, metadata extraction, initial uploads (EMIR/MiFID/SFTR)
5-6	Analysis Pipeline	Obligation extraction, CDE mapping, Neo4j graph schema
7-8	Integration Layer	MCP Server, REST API, CLI tool, dashboard prototype
9+	Production	Security, auth, monitoring, customer onboarding

Success Metrics

Category	Metric	Target
Technical	Document version accuracy	99%
Technical	Dependency resolution time	<5 minutes
Technical	Obligation extraction accuracy	90%+
Technical	CDE mapping confidence	95%+
Business	Design partners signed (6 months)	20
Business	Paying customers (9 months)	5
Business	ARR (12 months)	\$1M
Business	Gross margin	50%+

Next Steps

- 1. Validate with design partners:** 5-10 target clients for feedback
- 2. Secure funding:** \$216K for 8-week MVP development
- 3. Hire core team:** Regulatory analyst + 2 engineers to start
- 4. Build MVP:** EMIR + MiFID II regimes with basic analysis
- 5. Beta launch:** Q1 2025 with design partners
- 6. Commercial launch:** Q2 2025

Conclusion

The Regulatory Package Manager applies battle-tested software engineering practices (Maven, dependency management, versioning) to solve a \$10B+ market problem in RegTech. By treating regulations as versioned packages and building reusable analysis on top, we can:

- Reduce compliance costs** by 60-80% through automation
- Improve accuracy** through systematic version control
- Enable new use cases** (gap analysis, impact assessment, automated monitoring)
- Create network effects** through shared document repository
- Build defensible moats** through accumulated analysis artifacts

Investment ask: \$216K for 8-week MVP
Projected return: \$1M Year 1, \$20M Year 3
Time to first revenue: 6 months

Date: November 18, 2024