Regulatory Knowledge Base (RKB)

Purpose: Provide a controlled, auditable, regulator-grade source of truth that powers all AI agents, ensures zero-hallucination regulatory outputs, and enables end-to-end traceability from FCA regulation → policy → control → process → evidence.

This document defines: 1. The **RKB architecture** 2. The **FCA Handbook Mapping Table (canonical structure)** 3. The **Policy-Module → Regulation Matrix** used by your AI factory

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1. RKB DESIGN PRINCIPLES (NON-NEGOTIABLE)

1. **Curated, not scraped**
   Regulatory sources are ingested deliberately, versioned, and approved. Live web search is *not* a production dependency.

2. **Atomic regulatory statements**
   Each rule/expectation is broken into machine-usable units (not PDFs or whole chapters).

3. **Bidirectional traceability**
   You must be able to answer instantly:

4. "Which regulation justifies this policy clause?"

5. "Which policies satisfy this FCA rule?"

6. **Licence-aware scoping**
   The same regulation applies differently to SPI vs EMI vs Bank. Scope is explicit.

7. **Version-locked**
   Every RKB item is timestamped and versioned so historic applications remain defensible.

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2. RKB ARCHITECTURE (LOGICAL)

2.1 Core RKB Entities

Entity	Description
Regulatory Source	FCA Handbook module, regulation, guidance, PSR, EMR, MLR, etc.
Regulatory Statement	Atomic requirement or expectation
Licence Scope	SPI, Small EMI, API, EMI, Open Banking, etc.

Entity	Description
Obligation Type	Governance, Financial Crime, Safeguarding, Conduct, Systems & Controls
Policy Module	Reusable internal policy component
Control	Specific control or procedure
Evidence Type	Document, log, report, system output

3. FCA HANDBOOK MAPPING TABLE (CANONICAL MODEL)

This is the **spine** of the RKB. Everything else maps to this.

3.1 Table: `regulatory_sources`

Field	Description
id	UUID
authority	FCA / HM Treasury
source_type	Handbook / Regulation / Guidance
module	e.g. SYSC, COND, PSD, EMR
reference	e.g. SYSC 3.1.1R
title	Short title
effective_date	Date
version	FCA publication version
url	Official source link

3.2 Table: `regulatory_statements`

Atomic, machine-usable requirements

Field	Description
id	UUID
source_id	FK → regulatory_sources
statement_text	Normalised obligation text
obligation_category	Governance / AML / Safeguarding / Conduct / Ops

Field	Description
obligation_strength	Rule / Guidance / Expectation
applies_to	SPI / EMI / API / Bank
notes	FCA nuance / interpretation

Example

"A firm must establish, implement and maintain adequate policies and procedures sufficient to ensure compliance."

3.3 Table: `licence_applicability`

regulatory_statement_id	licence_type	applicability
SYSC-001	SPI	Required
SYSC-001	Small EMI	Required
SYSC-001	EMI	Enhanced

4. POLICY MODULE LIBRARY (YOUR SCALING ENGINE)

Policy modules are **not full documents**. They are composable regulatory building blocks.

4.1 Table: `policy_modules`

Field	Description
id	UUID
name	e.g. AML Governance Framework
description	What this module covers
risk_domain	Financial Crime / Ops / Conduct
reusable	Yes/No

4.2 Table: `policy_module_sections`

Field	Description
id	UUID

Field	Description
policy_module_id	FK
section_title	e.g. Risk Assessment
base_text	Template content
configurable_fields	JSON

5. POLICY-MODULE → REGULATION MATRIX (CRITICAL TABLE)

This is the **defensibility layer** regulators care about.

5.1 Table: `policy_regulation_mapping`

policy_module_id	section_id	regulatory_statement_id	control_description
AML-001	AML-RSK	MLR-18	Firm performs documented risk assessment
AML-001	AML-GOV	SYSC-6.1.1R	MLRO oversight and reporting

This table allows you to prove:

> "This paragraph exists *because* of this FCA rule."

6. CONTROL → PROCESS → EVIDENCE LINKING

6.1 Table: `controls`

Field	Description
id	UUID
policy_module_section_id	FK
control_text	Plain English control
frequency	Ongoing / Daily / Annual
owner_role	MLRO / Director

6.2 Table: `process_steps`

Field	Description
id	UUID
control_id	FK
step_order	Integer
step_description	Operational action

6.3 Table: `evidence_requirements`

control_id	evidence_type	retention_period
AML-CTRL-01	Risk assessment doc	5 years
AML-CTRL-02	SAR log	5 years

7. HOW AI AGENTS USE THE RKB

Intake Agent

• Tags facts to regulatory domains

Research Agent

• Pulls only from `regulatory_statements`
• Never invents obligations

Policy Agent

• Assembles policies by selecting relevant `policy_modules`
• Inserts only mapped sections

Diagram Agent

• Links each diagram node to `process_steps`

FCA Application Agent

• Answers form questions with **policy + regulation references**

Caseworker Agent

• Cites exact rules in FCA correspondence

8. GOVERNANCE OF THE RKB (INTERNAL)

Update Process

1. Regulatory change identified
2. New regulatory_statement drafted
3. Legal/compliance review
4. Version increment
5. Impact analysis on policy modules

Audit Guarantee

Every FCA submission can produce: - Regulatory coverage report - Policy-to-rule heatmap - Control adequacy checklist

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9. STRATEGIC VALUE (WHY THIS IS YOUR MOAT)

- Competitors sell **documents**
- You sell **regulatory infrastructure**

The RKB enables: - Faster turnaround - Lower error rate - Stronger FCA outcomes - Enterprise-level credibility

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End of RKB Design Document