

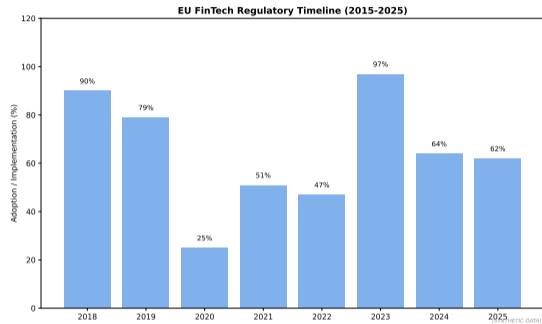
Lesson 11: Regulatory Frameworks

Module 1: FinTech Fundamentals

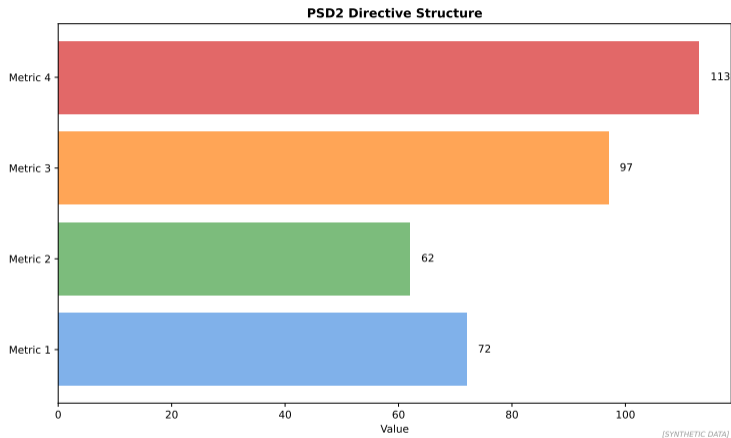
Digital Finance

Key Frameworks

- PSD2: Open banking
- MiCA: Crypto assets
- DORA: Digital resilience
- GDPR: Data protection



Four key EU regulations: PSD2 (open banking), MiCA (crypto), DORA (resilience), GDPR (data protection).

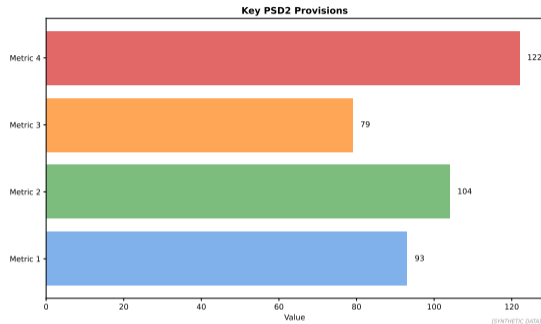


PSD2 mandates open banking APIs—enabling third-party access to bank accounts with customer consent.

PSD2 Key Provisions

Core Requirements

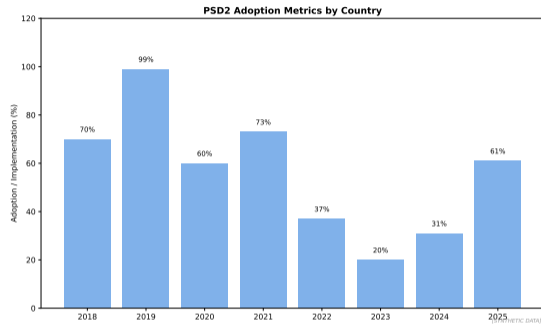
- Strong Customer Authentication
- Open API access
- Third-party provider licensing
- Liability framework



PSD2 requires strong customer authentication (SCA), open APIs, and TPP licensing with clear liability rules.

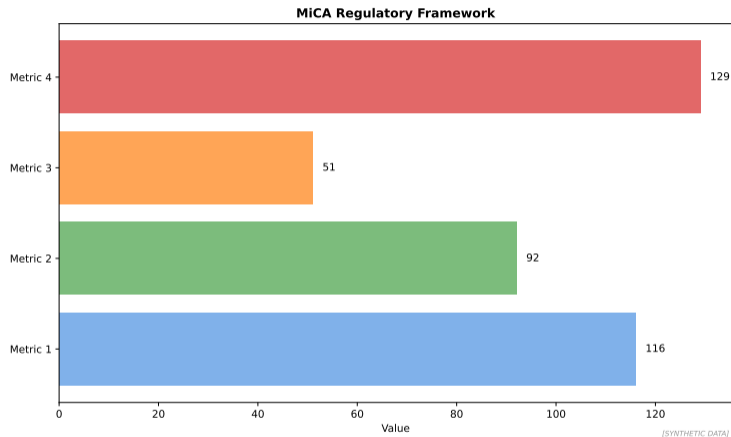
Market Effects

- 12M UK users (2023)
- 350+ registered TPPs
- £6B transaction value
- Innovation acceleration



PSD2 impact: 12M UK users, 350+ registered TPPs, 6B pounds in transaction value—driving innovation.

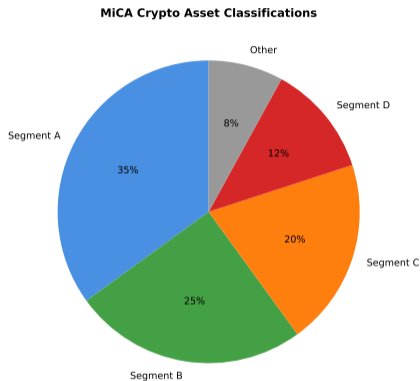
Markets in Crypto-Assets (MiCA)



MiCA is the EU's comprehensive crypto-asset regulation—covering issuance, trading, and custody.

Three Categories

- E-Money Tokens (EMTs)
- Asset-Referenced Tokens (ARTs)
- Other crypto-assets
- Different regulatory tiers



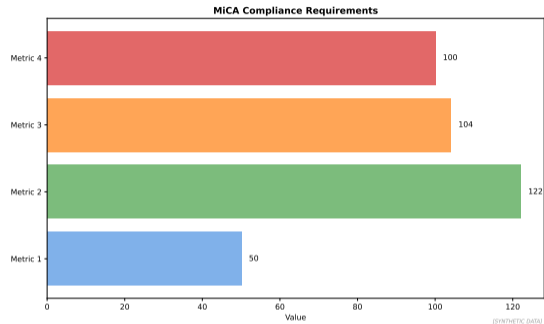
[SYNTHETIC DATA]

MiCA classifies crypto into EMTs (e-money), ARTs (asset-backed), and other tokens—each with different rules.

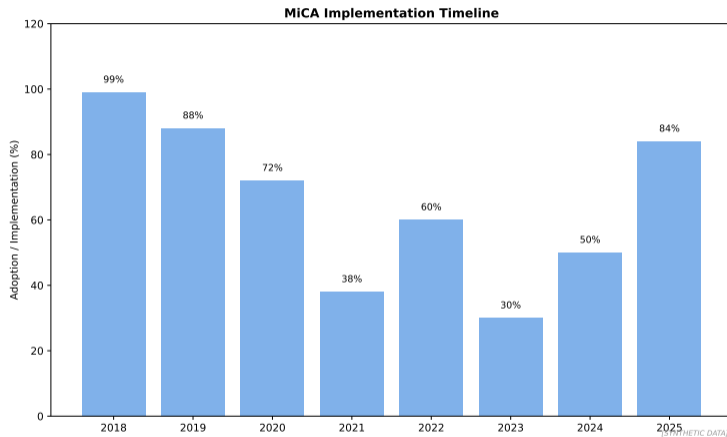
MiCA Requirements

Issuer Obligations

- White paper mandatory
- Reserve requirements
- Capital adequacy
- Consumer protection



MiCA requires white papers, reserve requirements, capital adequacy, and consumer protection measures.

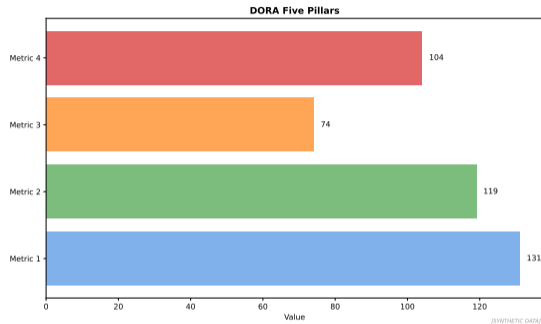


MiCA implementation: stablecoin rules June 2024, full implementation December 2024—EU single market.

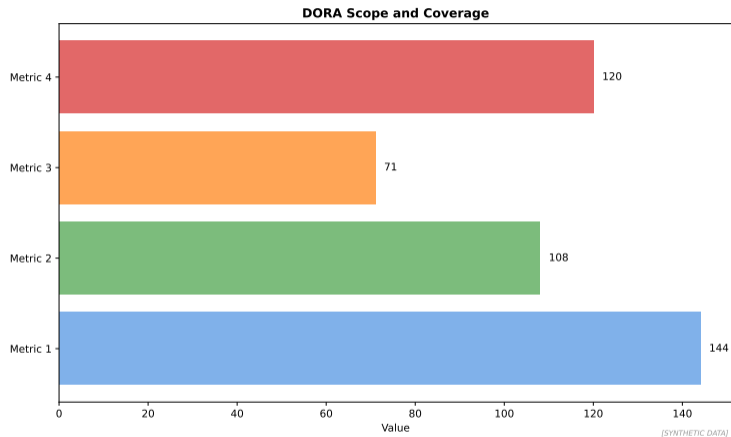
Digital Operational Resilience Act (DORA)

ICT Risk Management

- Cyber resilience standards
- Third-party risk oversight
- Incident reporting (72h)
- Testing requirements



DORA mandates cyber resilience, third-party oversight, 72-hour incident reporting, and testing requirements.

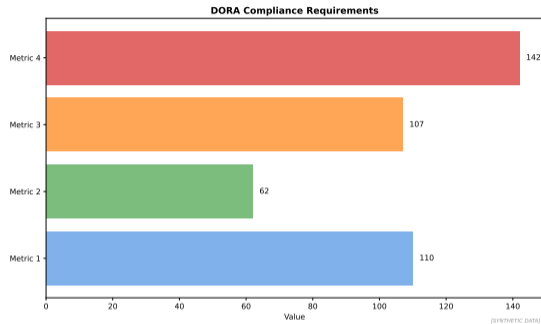


DORA applies to all financial entities—banks, insurers, asset managers, and critical ICT providers.

DORA Compliance Requirements

Key Obligations

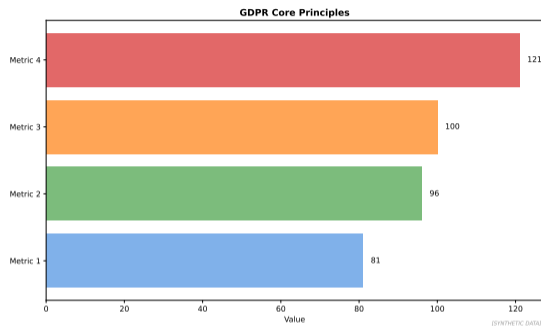
- ICT governance framework
- Threat-led penetration testing
- Business continuity plans
- Critical service oversight



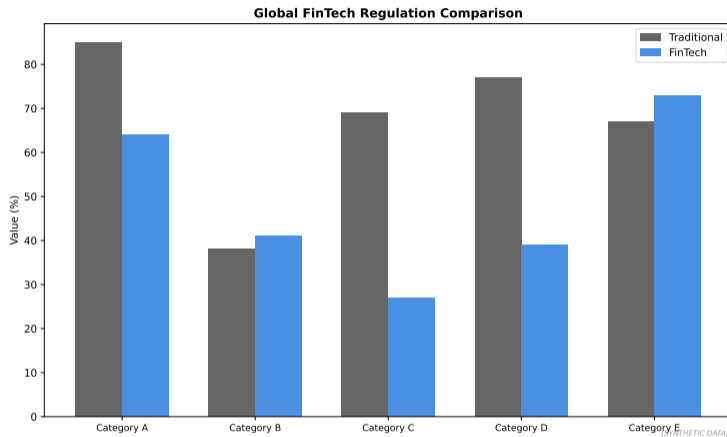
DORA requires ICT governance, threat-led penetration testing, business continuity, and service oversight.

Data Protection

- Explicit consent required
- Right to be forgotten
- Data portability
- 4% turnover fines



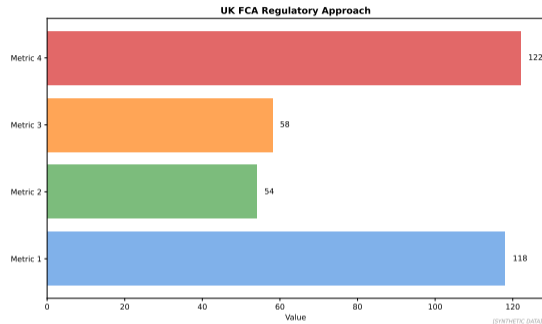
GDPR requires explicit consent, right to erasure, data portability—fines up to 4% of global turnover.



Global regulatory approaches vary widely—EU unified market vs US fragmented vs UK innovation-focused.

Divergence Strategy

- Financial Services Act 2023
- Edinburgh Reforms
- Sandbox expansion
- Equivalence negotiations

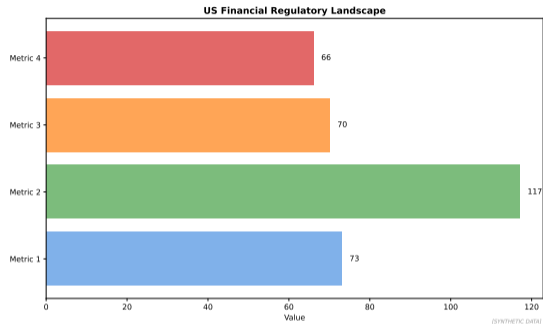


Post-Brexit UK pursues regulatory divergence—Edinburgh Reforms and expanded sandbox foster innovation.

US Regulatory Fragmentation

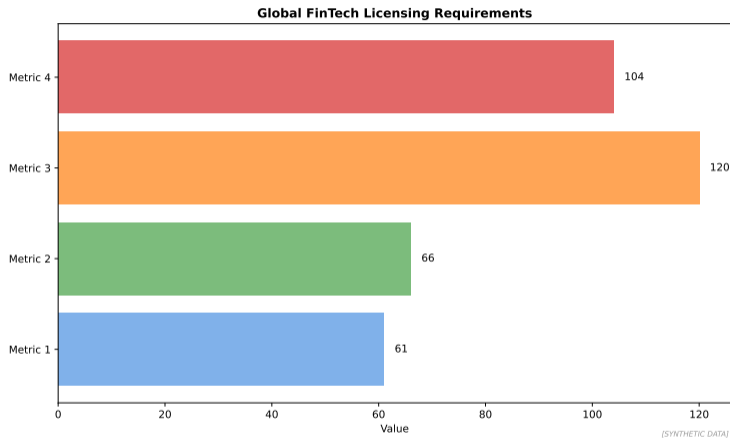
Multiple Regulators

- Federal: OCC, Fed, FDIC
- State: Money transmitter licenses
- SEC vs CFTC crypto debate
- 50 state compliance burden



US has fragmented regulation—federal agencies (OCC, Fed, SEC) plus 50 state licensing requirements.

Licensing Requirements

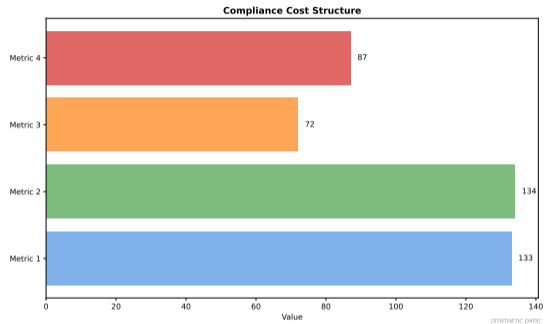


FinTech licensing varies by jurisdiction and service type—payment services, lending, and custody each have requirements.

Compliance Costs

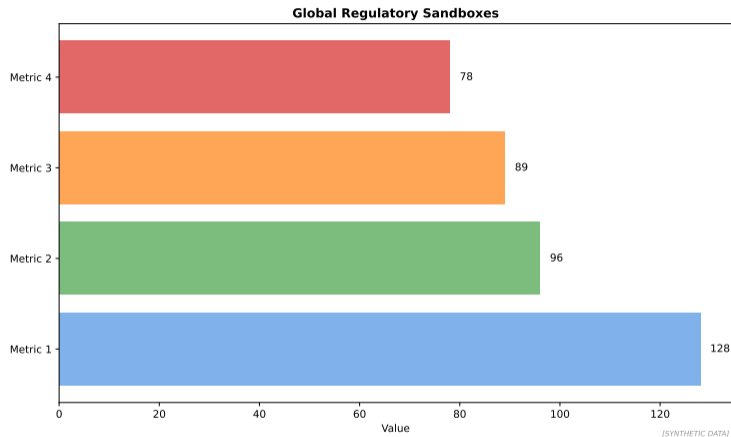
Cost Breakdown

- Initial licensing: **\$500K-2M**
- Annual compliance: **\$200K-1M**
- Staff: 10-15% headcount
- Technology: **\$100K-500K**



Compliance costs significant: \$500K-2M initial licensing, \$200K-1M annual, 10-15% of headcount.

Regulatory Sandboxes Globally

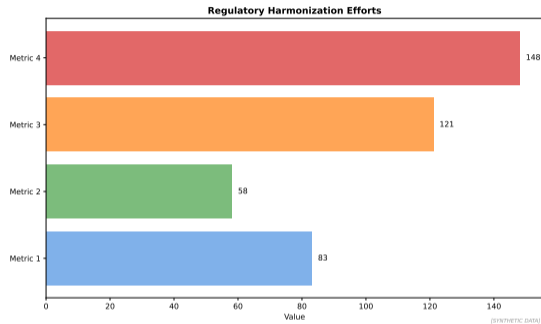


80+ countries have launched regulatory sandboxes—testing innovation under regulatory supervision.

Future: Harmonization Efforts

International Coordination

- Basel Committee guidance
- FSB crypto recommendations
- IOSCO principles
- Cross-border challenges



Basel Committee, FSB, and IOSCO work toward global standards—but cross-border challenges remain.

Key Takeaways

- **PSD2:** Enables open banking, 12M users in UK alone
- **MiCA:** Comprehensive crypto regulation, 2024 implementation
- **DORA:** ICT resilience, 72-hour incident reporting
- **Fragmentation:** US 50-state vs EU single market
- **Costs:** \$500K-2M initial + \$200K-1M annual

Regulatory frameworks balance innovation with protection—compliance is a strategic capability for FinTechs.