

# Lesson 11: Regulatory Frameworks

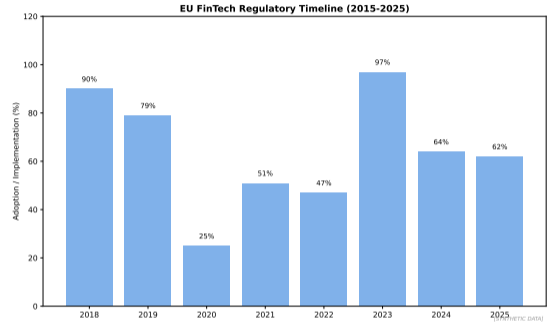
## Module 1: FinTech Fundamentals

Digital Finance

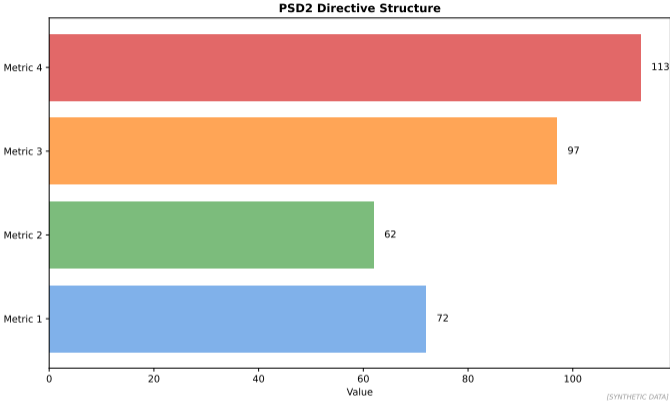
# Regulatory Landscape

## 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).

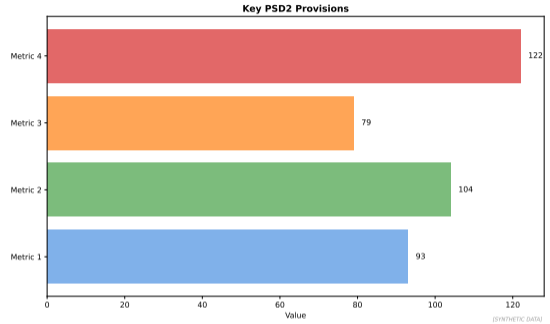


PSD2 mandates open banking APIs—enabling third-party access to bank accounts with customer consent.

# 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.**

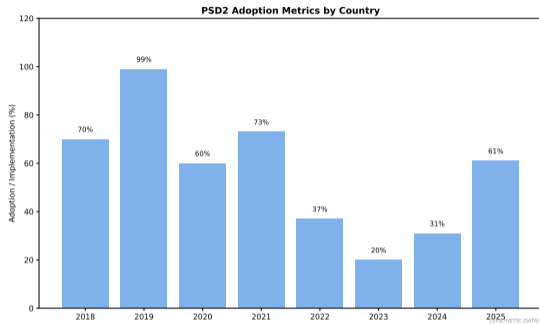
## Market Effects

- 13.3 million active users (March 2025)<sup>a</sup>
- 195 TPPs in UK, 356 in EEA (Q1 2025)<sup>b</sup>
- £6B transaction value
- Innovation acceleration

<sup>a</sup>Source: <https://www.statista.com/statistics/1314421/uk-open-banking-users/>

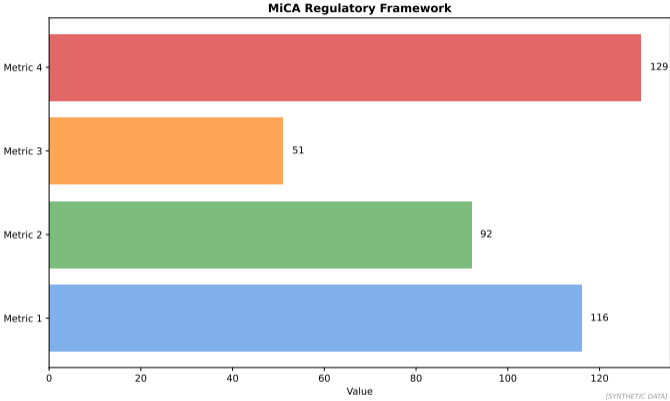
<sup>b</sup>Source: <https://www.konsentus.com/tpp-trackers/q4-2023/>

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PSD2 impact: 12M UK users, 350+ registered TPPs, 6B pounds in transaction value—driving innovation. [Source: World Federation of Exchanges 2024]

# Markets in Crypto-Assets (MiCA)

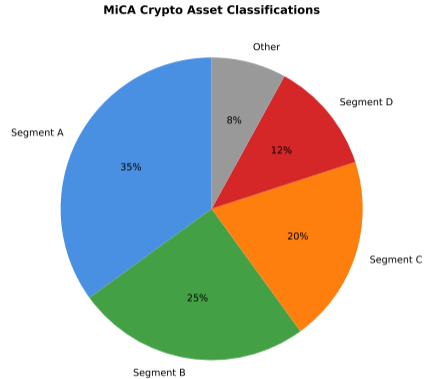


MiCA is the EU's comprehensive crypto-asset regulation—covering issuance, trading, and custody.

# MiCA Asset Classification

## Three Categories

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



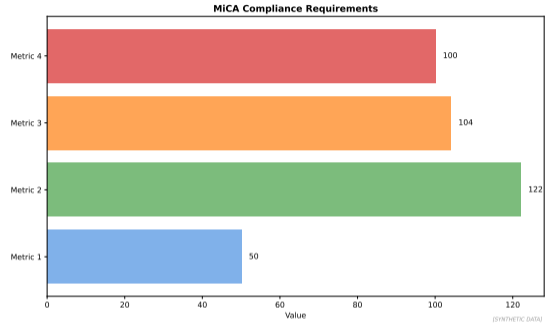
[SYNTHETIC DATA]

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

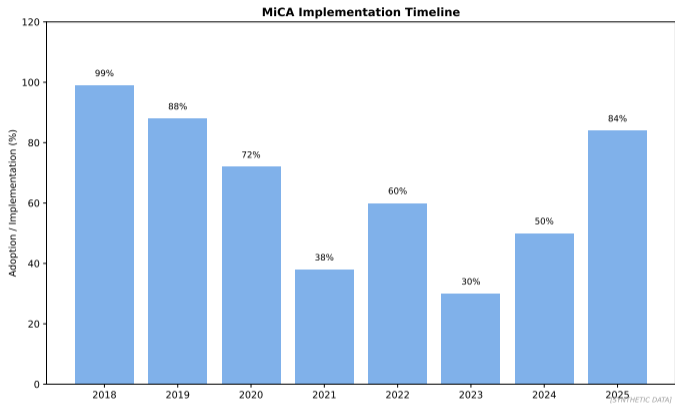
# MiCA Requirements

## Issuer Obligations

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



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

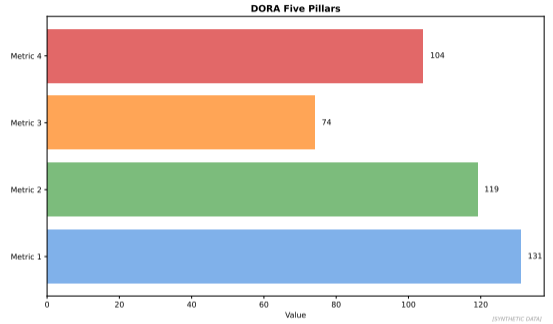


MiCA implementation: stablecoin rules June 2024, full implementation December 2024—EU single market.

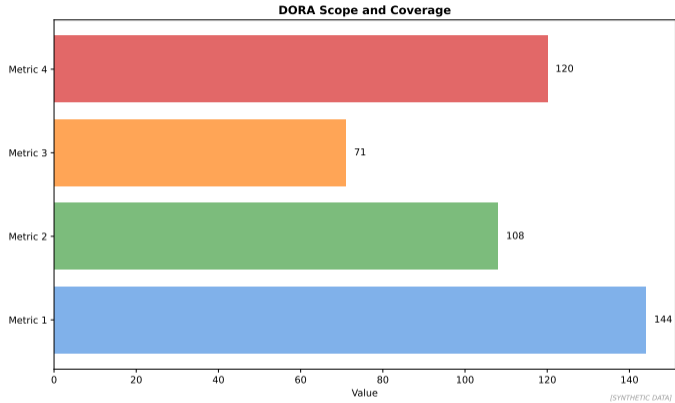
# Digital Operational Resilience Act (DORA)

## 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.**

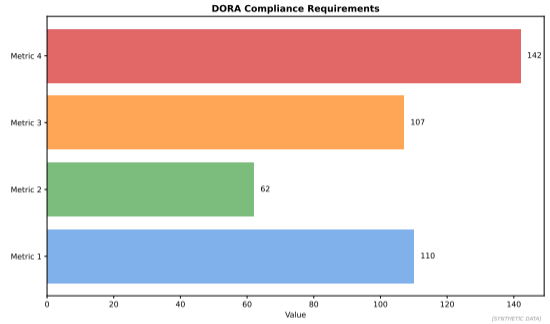


**DORA applies to all financial entities—banks, insurers, asset managers, and critical ICT providers.**

# DORA Compliance Requirements

## Key Obligations

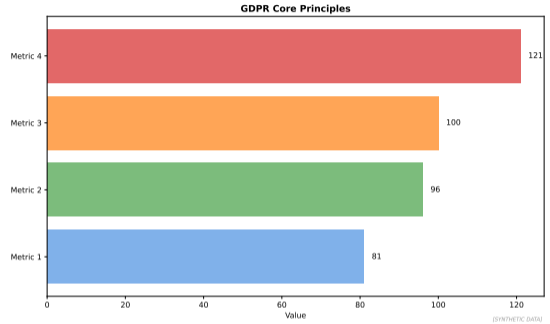
- ICT governance framework
- Threat-led penetration testing
- Business continuity plans
- Critical service oversight



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

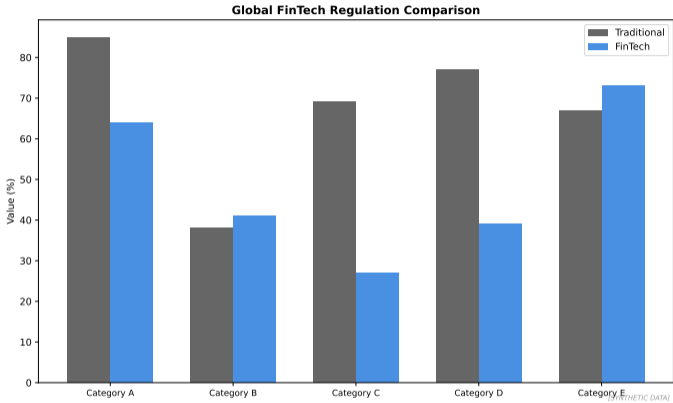
## Data Protection

- 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.**

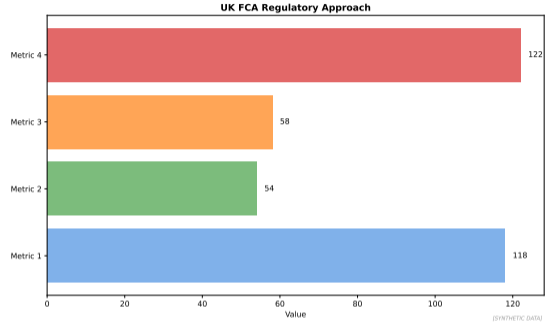
# Regulatory Divergence



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

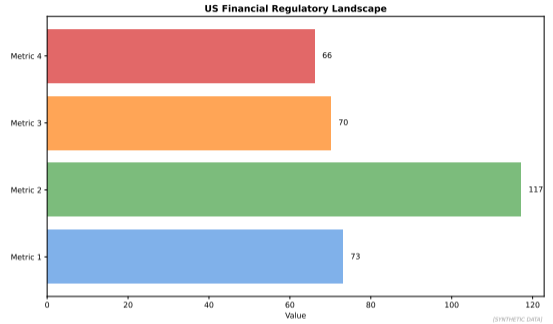


**Post-Brexit UK pursues regulatory divergence—Edinburgh Reforms and expanded sandbox foster innovation.**

# US Regulatory Fragmentation

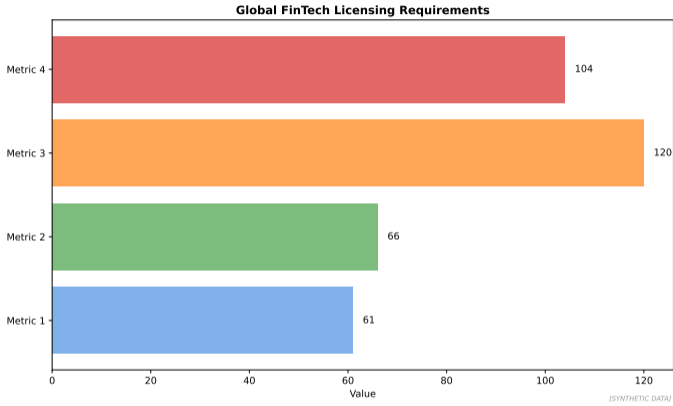
## Multiple Regulators

- 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

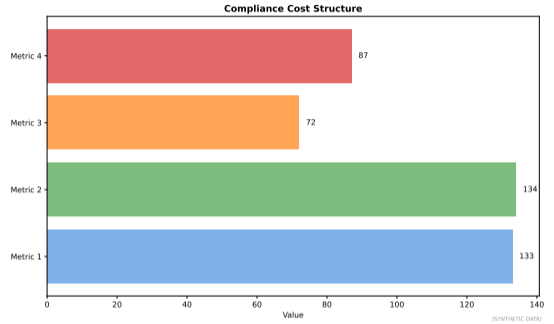


FinTech licensing varies by jurisdiction and service type—payment services, lending, and custody each have requirements.

# Compliance Costs

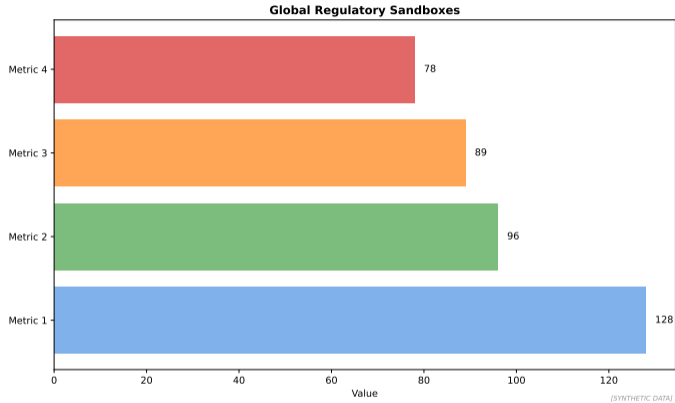
## Cost Breakdown

- 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. [Source: Industry reports 2024]

# Regulatory Sandboxes Globally



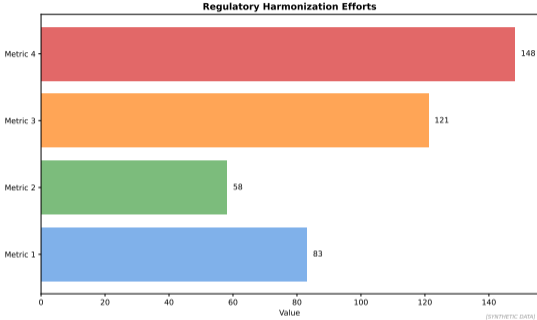
50+ countries have established fintech sandboxes (BIS confirmed)<sup>1</sup>—testing innovation under regulatory supervision.

<sup>1</sup>Source: <https://www.worldbank.org/en/topic/fintech/brief/key-data-from-regulatory-sandboxes-across-the-globe>

# 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

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Regulatory frameworks balance innovation with protection—compliance is a strategic capability for FinTechs. [Source: CB Insights, Statista 2024]