**Smart Financial Contracts** 



Mark Greenslade June '23

SFC Integrity

SFC Tokenisation SFC Payments

## SFC Integrity

#### **ACTUS**

(Counter Parties, Term Set, Algorithm, Cash Flows)



#### **Cryptographic Proofs**

(Signatures, Attestations, Fingerprints, ZK-Proofs)



#### DLT

(Smart Contract)

## **SFC Tokenisation**

#### Minting

(Identifiers, Direction, Counter Parties, Balances, Metadata)



#### DLT

(Smart Contract)



#### Servicing

(Auditors, Rating, Regulators, Markets)

## SFC Payments

#### **ACTUS Cash Flow**

(Timestamp, Direction, Amount, Denomination, Obligor)



#### **Payments Engine**

(Verify, Calculate, Open, Close, Default, Notify)



#### DLT

(Smart Contract)

## SFC Principles

## SFC Principles

Occams Razor

As Little As Possible, As Much As Necessary

Chain Agnostic

**Standard Smart Contracts** 

Privacy Preserving

Who, What, When, Why

Trust But Verify

**Cryptographic Proofs Everywhere** 

## SFC Challenges

Regulatory Certitude

Robust. Nuanced. Adaptive.

Counter-Party Risk

**Identity -> KYC/AML.** Defaults -> ???

SFC Challenges

Post Quantum Security

Cryptography equivalent to Y2K

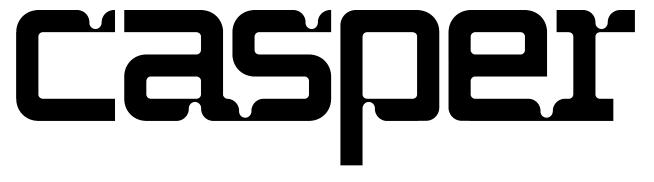
Jurisdictional Anchoring

**Smart Legal Contracts** 

Technological Flux

**Multi-Decadal Platforms** 

**Smart Financial Contracts** 



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