

THE GOOD, THE BAD, AND THE BILATERAL:

FROM WORKAROUNDS TO SHARED CUSTODY STANDARDS

24 September 2026 DBG OpenDay



CRYPTO FINANCE

DEUTSCHE BÖRSE
GROUP

CRYPTO FINANCE GROUP AT A GLANCE

Your regulated gateway to the world of digital assets

Pioneering Since 2017

Founded to deliver institutional-grade digital-asset infrastructure and established among Europe's earliest fully regulated providers of trading, custody, and post-trade services, dedicated exclusively to financial institutions.

Wholly Owned by Deutsche Börse Group

Positioning Crypto Finance within one of the world's leading financial-market-infrastructure providers and enabling delivery of digital-asset services through the Group's established ecosystem.

Institutional Track Record at Scale

Institutional Clients

130+

Banks Served

40+

Assets in Custody

USD 7bn+

Supported Tokens

400+

Regulated Across Key Jurisdictions

Operating as a FINMA licensed securities firm in Switzerland and as a MiCA regulated broker and custodian in the European Union licensed under BaFin in Germany, to support compliant digital-asset activities at scale.

Covering All Digital Asset Services

Serving more than 130 financial institutions, including over 35 banks, backed by a deep institutional track record that removes operational complexity and unlocks seamless market access.

Trusted by Leading Financial Institutions



...and many more

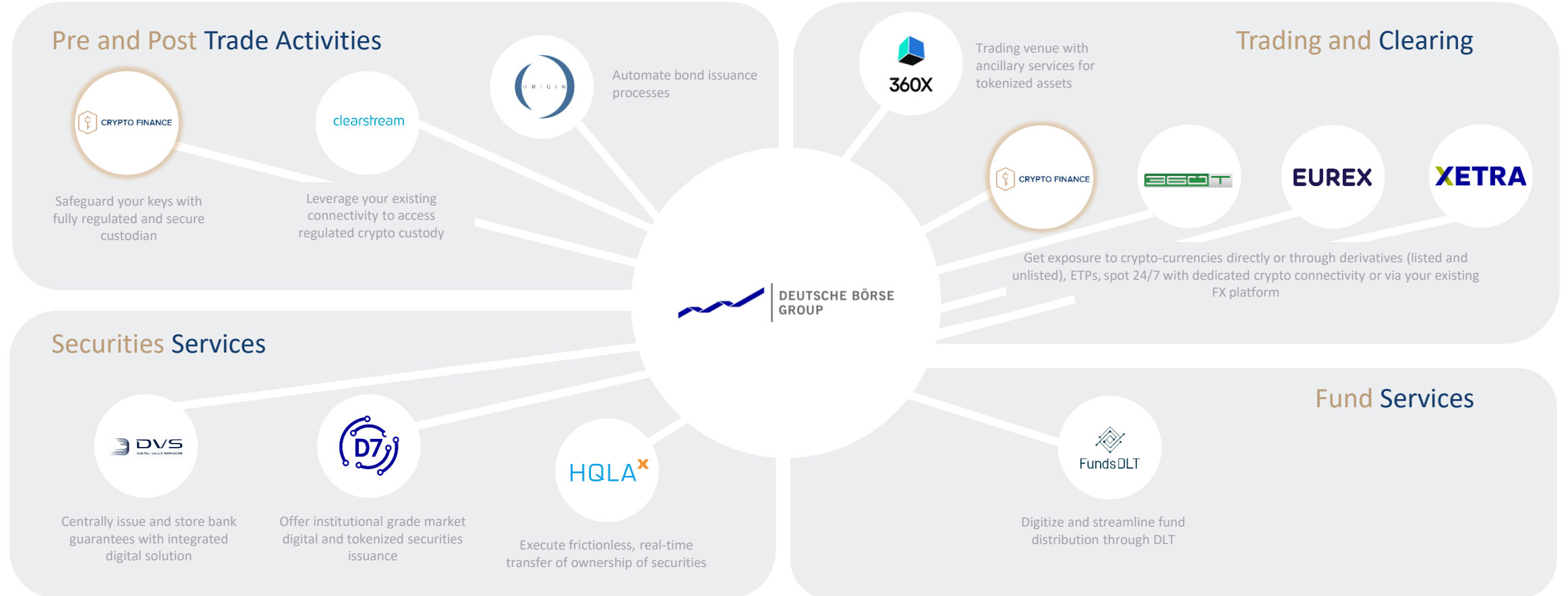


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A GROUP WIDE COMMITMENT TO DIGITAL ASSETS

From crypto assets and stablecoins to tokenized securities and beyond, Deutsche Börse Group is fully committed.



YOUR REGULATED GATEWAY TO THE WORLD OF DIGITAL ASSETS

Please contact us to find out more about our products
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FROM YOUR EXPERIENCE, HOW DO CRYPTO
CUSTODIANS EXCHANGE
INFORMATION TODAY?

HOW STANDARDS PROLIFERATE:

(SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC)

SITUATION:
THERE ARE
14 COMPETING
STANDARDS.

14?! RIDICULOUS!
WE NEED TO DEVELOP
ONE UNIVERSAL STANDARD
THAT COVERS EVERYONE'S
USE CASES.



SOON:

SITUATION:
THERE ARE
15 COMPETING
STANDARDS.



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PROBLEM STATEMENT

Setting the objectives

01

Fragmentation: Custodians currently rely on bilateral, non-standardized processes, creating a network of one-off integrations that do not scale efficiently.

02

Missing Context: The information exchanged lacks standardized context, such as identity, validation, and risk—making it difficult to ensure safe and reliable transactions.

03

No Enforcement: Even when data is shared, there is no consistent mechanism to enforce rules across custodians, leading to inconsistent validation and reduced trust.

WHAT ARE THE EXISTING SOLUTIONS?

		CHANNEL			
		SWIFT	TRP	OTL	API / SFTP
MESSAGE	MT5xx	X			X
	IVMS		X	X	X
	Prop.	X	X	X	X
	Address Sharing Standard	X	X	X	X

SWIFT STANDARD MESSAGES IN CRYPTO ECOSYSTEM

SWIFT for transfer instructions

SWIFT for DvP settlement

WHITE PAPER 2026

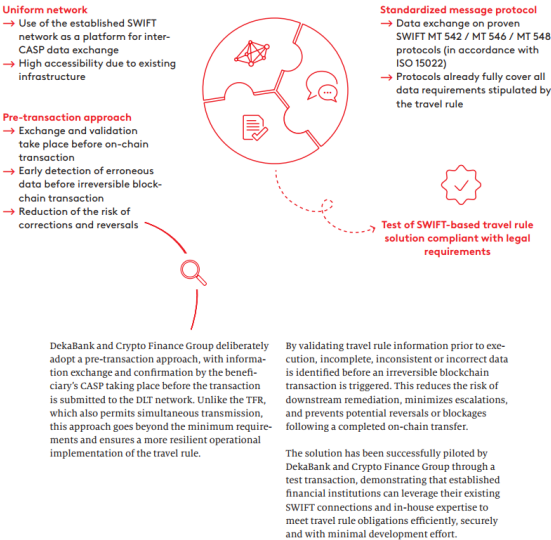
SWIFT-based travel rule solution

Establishing a scalable market standard for crypto transactions in European banking

Illustration of the process steps in the travel rule test setup

- 1 Initiation of crypto transfer**
The travel rule process is triggered by a transfer instruction in the customer front end, which forwards the delivery instruction to the digital asset management (DAM) system.
- 2 Creation and transmission of SWIFT MT 542 file**
The DAM system selects the relevant travel rule data, converts it into the MT 542 format via an internal SWIFT connection and sends it to Crypto Finance Group via the SWIFT network.
- 3 Receipt of transfer data**
Crypto Finance Group receives the MT 542 file and routes it to its internal systems for automated processing.
- 4 Verification of transfer data**
The transmitted travel rule data is automatically checked for completeness and plausibility, including name matching and on-chain forensics.
- 5 Creation and transmission of SWIFT MT 548 file**
After successful completion of the check, an MT 548 message is generated and transmitted via SWIFT, embedding the on-chain transfer details.
- 6 Receipt of MT 548 acknowledgement**
DekaBank receives the MT 548 file via the SWIFT network and transmits it internally to the DAM system for further processing.
- 7 Transfer approval by back office**
The back office reviews the MT 548 file and grants final approval for the on-chain transaction to proceed.
- 8 Receipt of on-chain transfer**
Crypto Finance Group receives the on-chain transaction and credits it to the recipient's account.
- 9 Creation and transmission of SWIFT MT 546 file**
Only after settlement of the on-chain transaction, an MT 546 confirmation is generated and sent back to DekaBank via the SWIFT network.
- 10 Receipt of MT 546 confirmation**
DekaBank receives the MT 546 confirmation, and the travel rule exchange is regarded as successfully completed.

Design principles of SWIFT-based travel rule solution



IN YOUR OPINION,
WHAT NEEDS TO BE STANDARDIZED?

WHERE DO WE NEED A STANDARD?

Communication channels

- APIs (how systems connect)
- Messaging protocols (how data is transmitted)
- Message format (how messages are structured and understood)



Information

- Address handling (format, validation, lifecycle)
- Address exchange (how addresses are shared between custodians)
- Identity & compliance data (Travel Rule, AOPP)
- Transaction information (transaction status)
- Pledge information (pledge status, pledge messages)
- Blockchain events / Corporate actions



WHY STANDARDIZATION MATTERS BEYOND CONVENIENCE?

Current Approaches to Address Sharing:

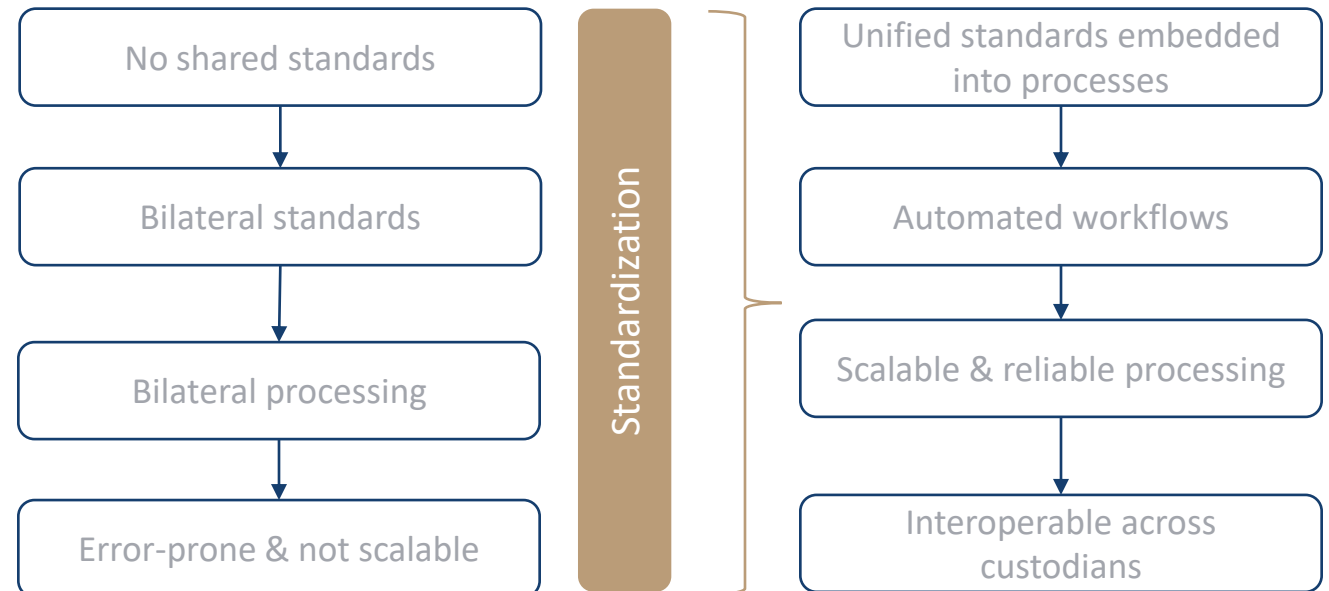
- Address reuse / omnibus structures:

Operationally efficient but limits flexibility
Complex and difficult to scale
Manual (wet-ink) whitelisting

- Central repositories

Introduce high counterparty exposure
Additional control layers increase complexity

Standardized Approach:



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IS ADDRESS RE-USE GOOD OR BAD?

Benefits for retail use

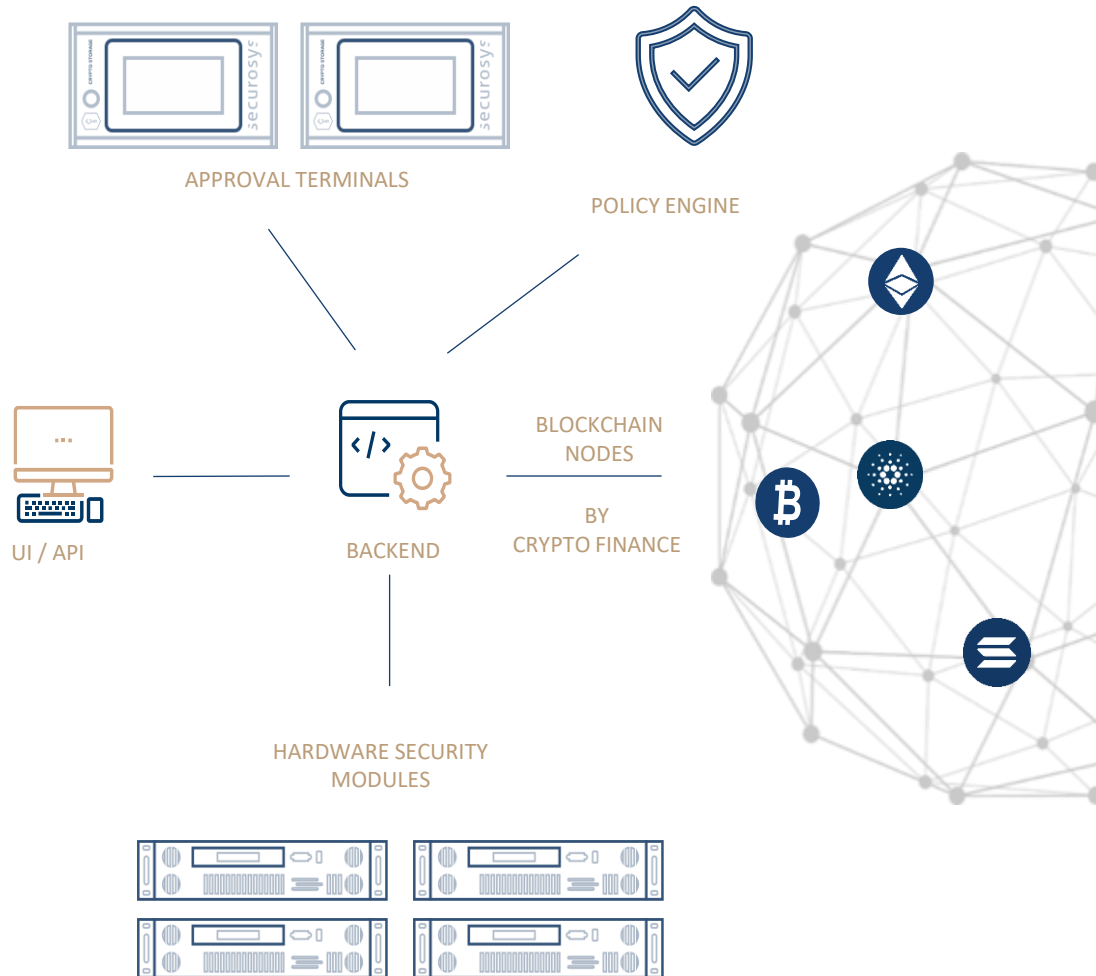
- Unlinking of addresses
- Hiding of destinations vs. change
- Temporary segregation of incoming payments (individual deposit addresses)

Do those benefit also institutions?

- Not desirable for blockchain forensics (retain taint score across all addresses)
- High-throughput operations reveals link fast anyways
- Pre-announcement requirements negate individual deposit addresses use-case

Benefits of institutional re-use

- Consistent reputation over time
- Simplifies coordination and ongoing relationships
- Builds a known and reachable identity
- Enable operational efficiencies for counterparties



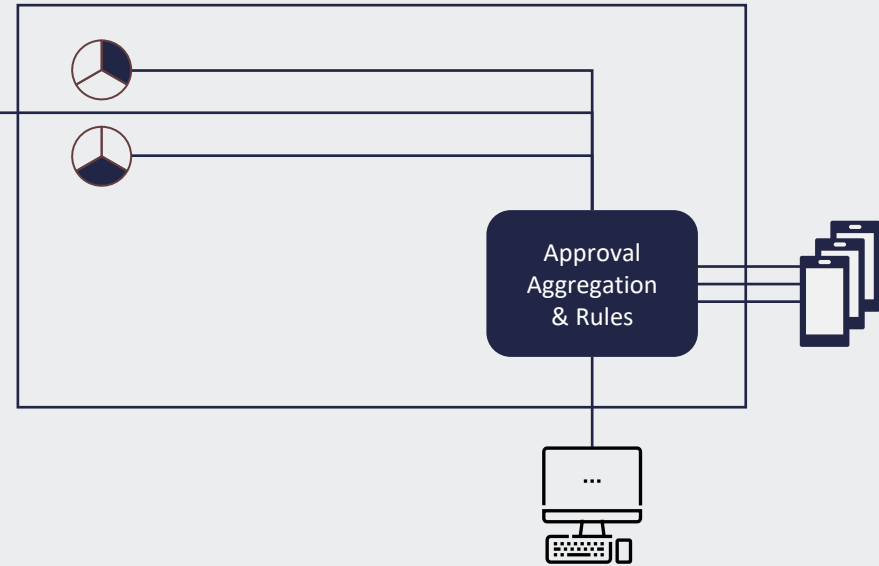
POLICY ENGINE – ENFORCING SHARED STANDARDS

- Non-custodial, API-first governance layer
- Sits between transaction intent and execution
- Validates transactions before signing
- Enforces predefined rules and policies automatically

Main features:

- Eliminates inconsistent validation across custodians
- Makes controls non-bypassable and auditable
- Enables deterministic and scalable enforcement

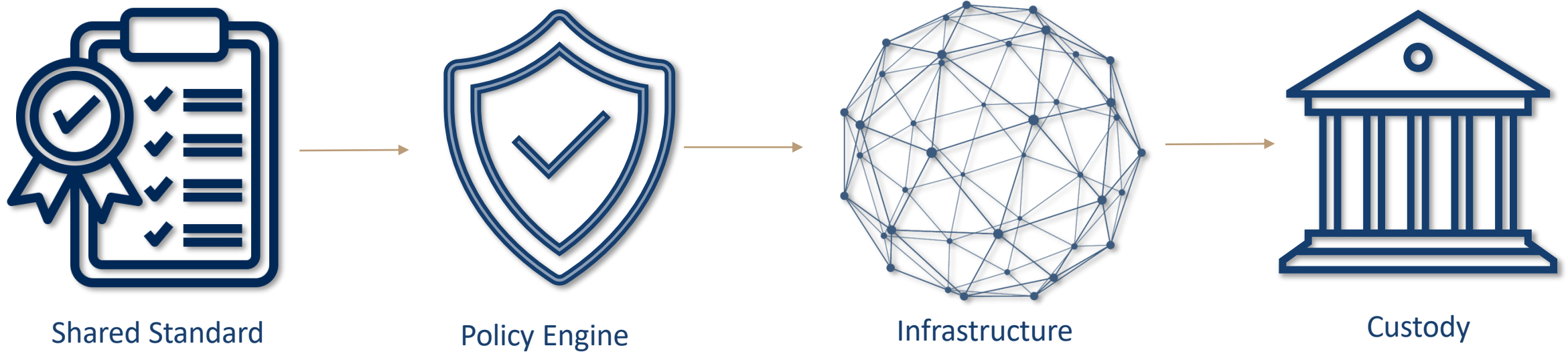
Standardization involves not only agreement, but also a mechanism to enforce rules consistently across participants



POLICY ENGINE – ENFORCING SHARED STANDARDS

- Stand-alone component
- Will plug in to various infrastructure solutions
- Co-approve on their native mechanism

LAYERS OF THE CUSTODY VALUE CHAIN



SHIFT SECURITY LEFT

LET'S DRAFT SOMETHING

```
{
  "address": "bc1q0a34psvsgjnl024s5xvsjqhad7mk2ffjdz85t0",
  "address_controller": {
    "type": "name", # or LEI? or BIC?
    "value": "Lewin Custody AG"
  },
  "beneficial_owner": { # questionable. Does not necessarily belong into the address sharing message.
    "type": "name", # or LEI? or BIC?
    "value": "Lewin Boehnke"
  },
  "address_type": "omnibus", # same as above
  "audience": {
    "type": "name", # or LEI? or BIC?
    "value": "CVA CSWG Meetup participants"
  },
  "accepted_assets": {
    "type": "ISIN", # or DTI? or ticker (very non-standardized)
    "values": ["XTV15WLZJMF0"], # or "4H95J0R2X"? or "BTC"?
  },
  "attestation_date": "2026-09-23T20:06:16Z", # or epoch 1783368376?
  "valid_until": "2026-10-01T00:00:00Z", # or epoch 1785542400
  "deposit_limit_usd": "1000000.00", # needs a way to distinguish transfer- and daily limits?
  "deposit_limit_token": { "XTV15WLZJMF0": 20 } # either this or the above
}
```

Encoding? Pick your poison:

- Canonicalized JSON
- ProtoBuf
- JWT

As long as it's unambiguous enough to sign it.



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