

CBMT Workshop

Featuring the Official Launch of the CBMT
Sandbox with its Infrastructure and
Management Systems

November 19th, 2025

Agenda

01

15:15 – 15:30

Welcome: CBMT Overview Status Update

02

15:30 – 15:45

**Landscape of Token-based Digital
Currencies and CBMT Sandbox and TSP**

03

15:45 – 16:30

**CBMT Sandbox Live Demonstration and
Use cases**

04

16:30 – 16:45

Open Q&A and Closing Discussion



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Commercial Bank Money Token

Roberto Pagliari, Director DLT and Cash and Markets, Commerzbank

Claus George, Head of Digitalization & Innovations TxB, DZ BANK

November 19, 2025

“As industries start to adopt DLTs to develop new ecosystems, the limitations of current forms of money become increasingly apparent. The automation of business operations in DLT ecosystems requires completely synchronised and self-governing payment flows and thus German Industry demands a safe form of DLT-based money (money “on-chain”).”

BDI - Federation of German Industries

<https://english.bdi.eu/publication/news/commercial-bank-money-token>

COMMERCIAL BANK MONEY TOKEN

Token that has the essential characteristics of commercial bank money. Among others:

- Claim of customers against banks (deposit)
- Fungible like commercial bank money
- Exchangeable into today's commercial bank money

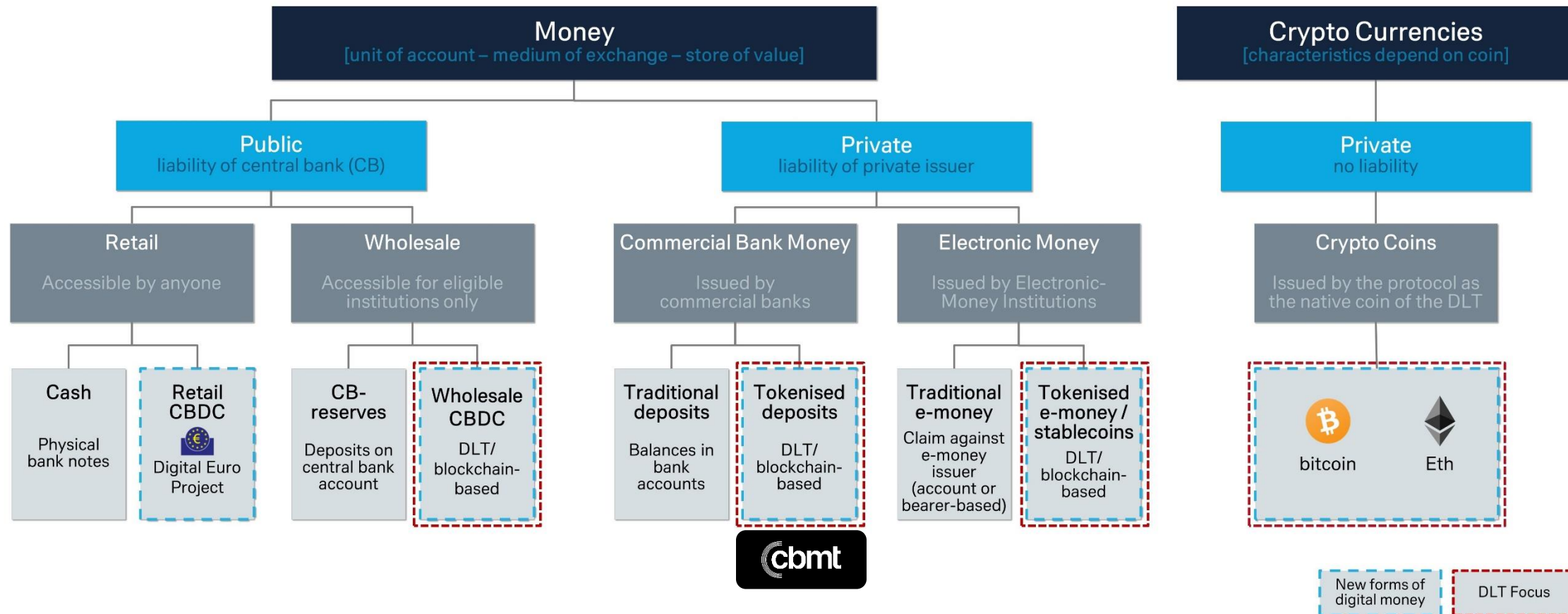
No Cryptocurrency, No Stablecoin, No CBDC!

“Commercial bank money has the right characteristics to be a secure form of on-chain money.”

BDI - Federation of German Industries

<https://english.bdi.eu/publication/news/commercial-bank-money-token>

Commercial Bank Money Equals Roughly 85 Percent of the Money Supply in Europe Today



Source: <https://flow.db.com/cash-management/cbdcs-in-europe-retail-and-wholesale-projects-to-follow>

The Missing Link: CBMT— Money-on-Chain Integration in DLT Business Processes

PROCESS WITHOUT „MONEY-ON-CHAIN“

Process	BUSINESS / FINANCING PROCESS	PAYMENT PROCESS
System	DLT	Bank infrastructure

DESCRIPTION

Payment process separate from business process. Delayed payment initiation due to system break.

PROCESS WITH

Process	BUSINESS / FINANCING PROCESS	PAYMENT PROCESS
System	DLT	

DESCRIPTION

By integrating business and payment processes into the same system, atomic swaps enable transactions that either complete in full or not at all, enabling new business models.

CBMT Design Principles Are Chosen to Maximize the Benefits for Corporates



MULTI-ISSUER

- Full fungibility of tokens
- Open for any bank



COLORED TOKEN

- One technical token, but different colors (one color per bank)
- Colors also used for multi-currency functionalities



TECHNICAL SERVICE PROVIDER

- Single point of contact:
- Contractual DLT infrastructure partner
 - Technical token issuer



PROGRAMMABLE PAYMENTS

- Possibility to program transactions via smart contracts



MULTI-DLT CONCEPT

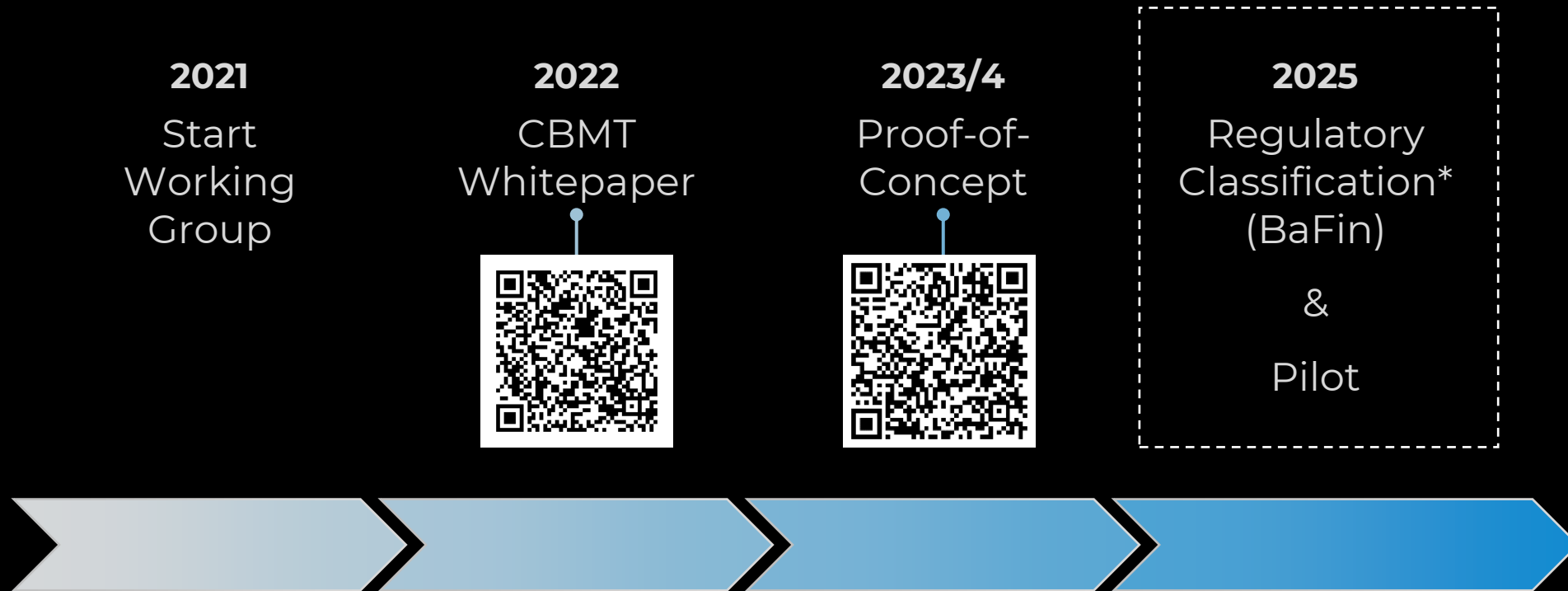
- CBMT will be provided on industry solutions - no own DLT

CBMT Combines the Benefits of DLT and Commercial Bank Money and is Developed in Close Collaboration with Industry



CBMT aims to be particularly suitable for integrable, programmable payments in B2B-processes

Today: Awaiting Regulatory Feedback to Proceed Real-Money Pilot Phase



* Whether CBMT is a new technical form of deposits, electronic money, or electronic money tokens.

EPN: A Neutral, Ethereum-Based Network for Corporates

Public Permissioned • Gas-Free Interaction • Ethereum-Based DLT for Real

- EPN is a Ethereum-based DLT for modelling entire business processes; supports real-world enterprise operations with identity, governance, and apps integrated
- Complete Ecosystem - wallet, node, governance, research, onboarding
- Instead of a platform operator, it is the DL technology that secures trust in the EPN
- Developed to create added value for all network members through digital coordination and collaboration

EUROPEAN PUBLIC NETWORK

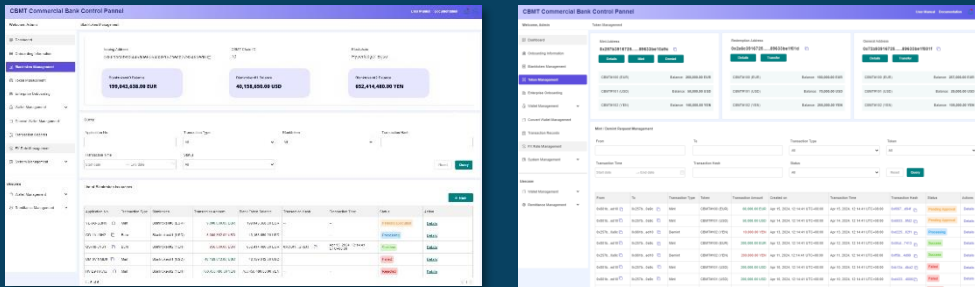


Further Information: <https://www.e-p-n.eu>

UDPN: New Messaging Infrastructure for Digital Currencies

Seamless Onboarding & Use Case Development • Multi-Blockchain Support

CBMT Control Panel



APIs for Development of Corporate Use Cases

POST Query latest exchange rate

POST /v1/txsp/sys/home/latest/exchange/rate/searches

Find the latest exchange rates for all exchange rate pairs

Response Examples

200 Response

```
{
  "code": "string",
  "message": "string",
  "data": {
    "outLatestExchangeRateInfoList": 2,
    "count": 2
  }
}
```

- 10+ Getting Started APIs
- Over 100+ Full APIs

UNIVERSAL DIGITAL PAYMENT NETWORK



Further Information: <https://udpn.io>

CBMT, CBDC, Stablecoins, Cryptos:

Which is the Best Money Form?

Who are you?

Consumer, businessperson, statesperson, economist, anarchist

Your needs?

Local/worldwide value transfer, loans, full banking services?

Your pains?

Risk, fungibility, cost, speed, reach

Your Currency?

USD? EUR? JPY? GBP? CNY? You have one? Multiple currencies?

Your payment rail?

SEPA, FedNow, ACH, AliPay, PIX, M-Pesa, Cards, Cash, ...

Your regulation?

MiCA, GENIUS, none?



If you meet someone who claims to have a universal answer, ignore them.

Q&A

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of money

MORE ABOUT
THE CONCEPT:



Landscape of Token-based Digital Currencies and CBMT Sandbox and TSP

Excellence Through Innovation and Superior Partnerships



Technical Service Provider

- Reliable Operations
- Sustainable Services
- Deep Financial Services Knowledge



System Integrator

- Banking System Integration
- Enterprise System Integration
- DLT & Smart Contract Setup



Technology Infrastructure Provider

- DLT Management
- Interoperability Services
- Open API Integration Layer

Benefits of CBMT for banks and enterprises

Next
Generation
Bank Accounts

Instant Inter-
Bank
Settlement

More
Efficient
Corporate
Treasury
Management

Reduced
Counterparty Risk



Enhanced Customer
Experience



Simplified Regulatory
Compliance



Improved Liquidity



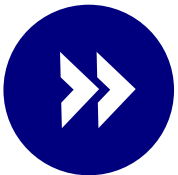
Lower Costs



Greater Efficiency



Transparency and
Traceability

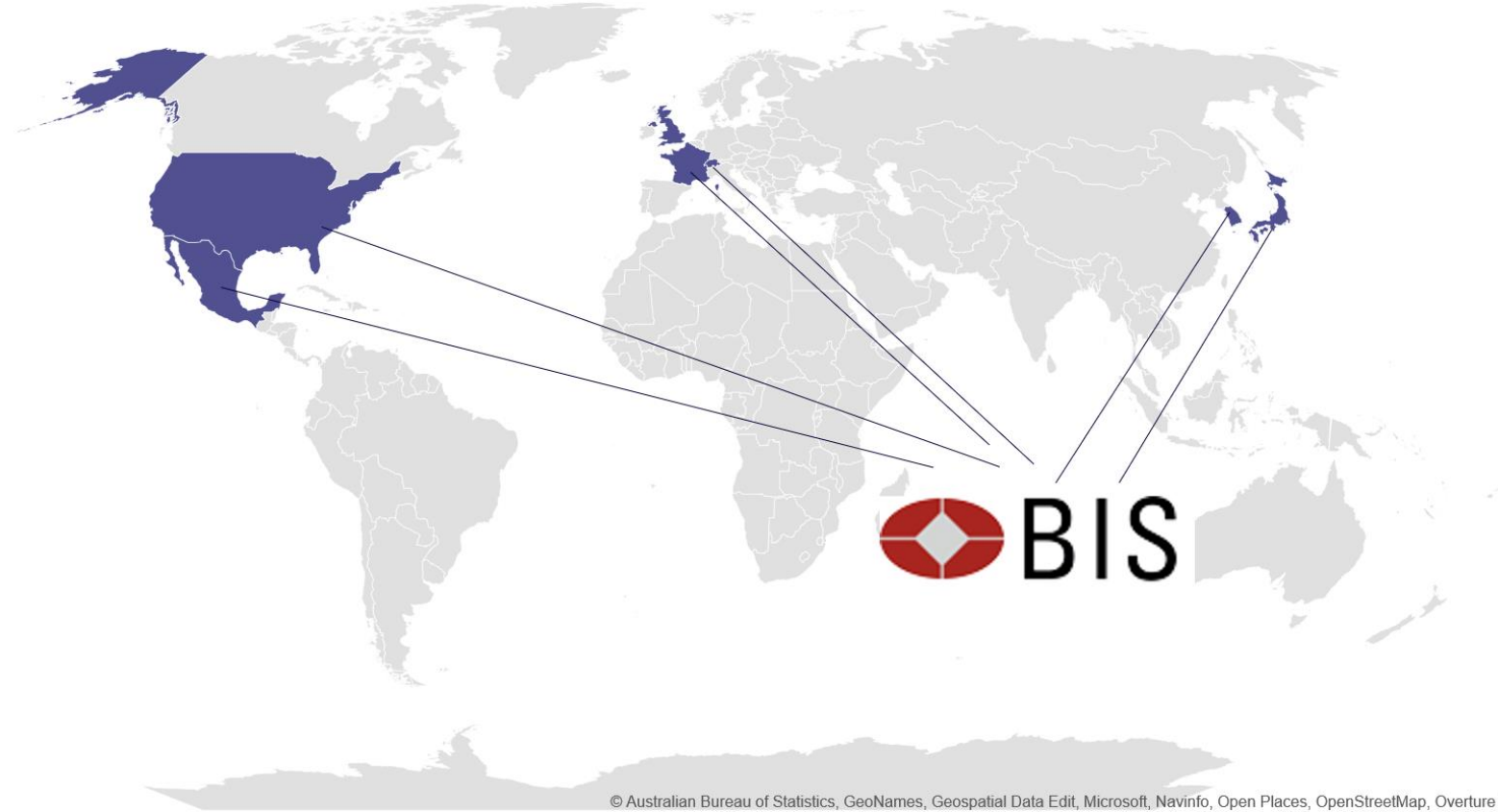


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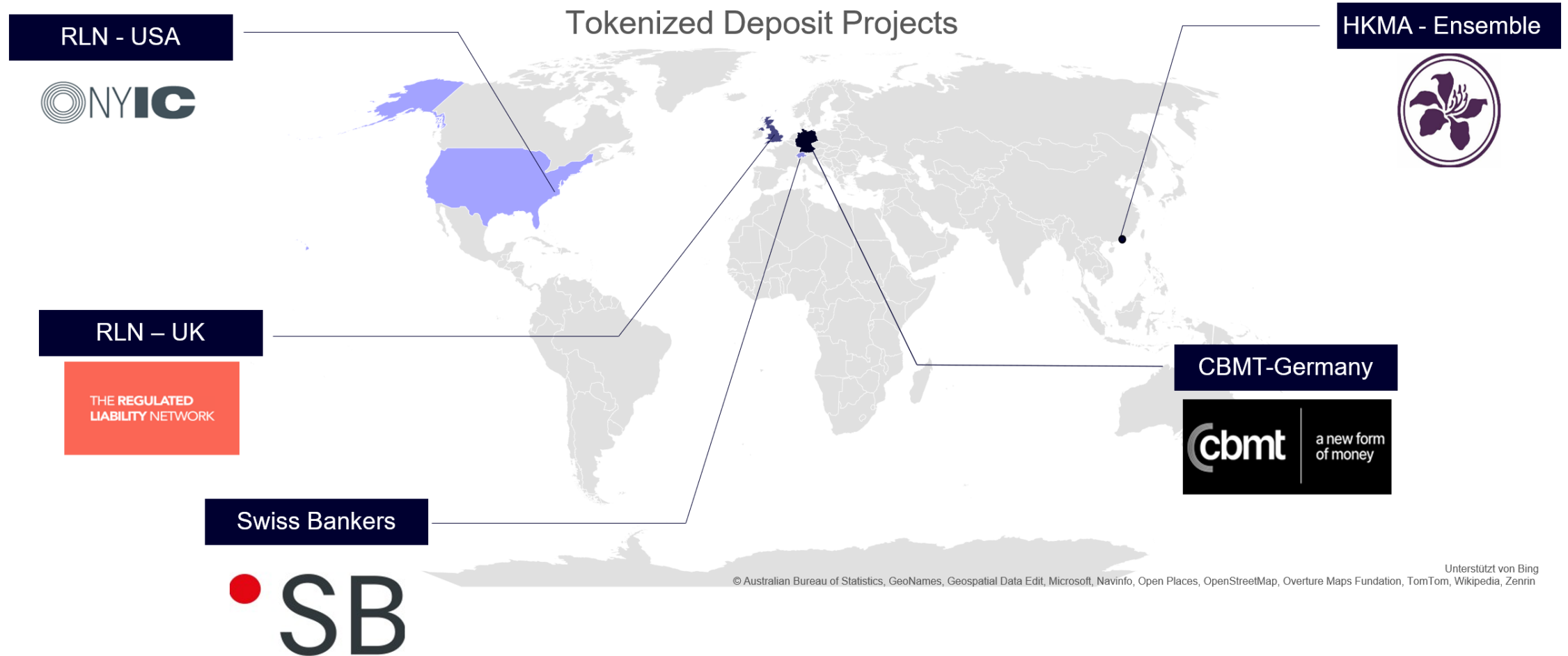
Agorá

Tokenized Deposit Projects

- The project is a public-private partnership between central banks and a large group of regulated private sector firms with a presence in the cross-border payment ecosystem.
- The BIS has brought together seven central banks (representing the five top international reserve currencies)



Proof of Concepts conducted or ongoing at major economies



The Irreversible Regulatory Trend



2023-04-01

Kazakhstan

Law on Digital Assets



2023-06-01

Japan

Amendments to the
Payment Services Act (PSA)



2023-08-15

Singapore

MAS Single-Currency
Stablecoin (SCS) Regulatory
Framework



2024-06-30

European Union

Regulation (EU) 2023/1114 –
Markets in Crypto-Assets (MiCA)



2024-07-26

Switzerland

Guidance on the Issuance of
Stablecoins



2024-08-31

UAE

Payment Token Services
Regulation



2025-06-10

Korea

Digital Asset Basic Act (DABA)



2025-07-04

Bahrain

Stablecoin Issuance and Offering
(SIO) Module



2025-07-18

United States

GENIUS Act of 2025 (Guiding and
Establishing National Innovation for
U.S. Stablecoins Act)



2025-08-01





Hong Kong (SAR)

Cap. 656 Stablecoins Ordinance

The new market is forming!

Landscape of Token-based Digital Currencies and CBMT Sandbox and TSP

New Core Banking System (token-based) and New “SWIFT”

<u>Traditional Fiat Banking</u>		<u>Regulated Digital Currency</u>			
Core Systems	 <p>Every bank has a Core Banking System to Manage Fiat Accounts</p>				
		Stablecoin	Tokenized Deposit	Wholesale CBDC	Retail CBDC
Networks	 <p>SWIFT provides a common gateway that connects all Core Banking Systems</p>				
		Decentralized Network Model	Unified Ledger Model	Virtual Unified Ledger Model	Intermediate Token Model

History of Core Banking Systems



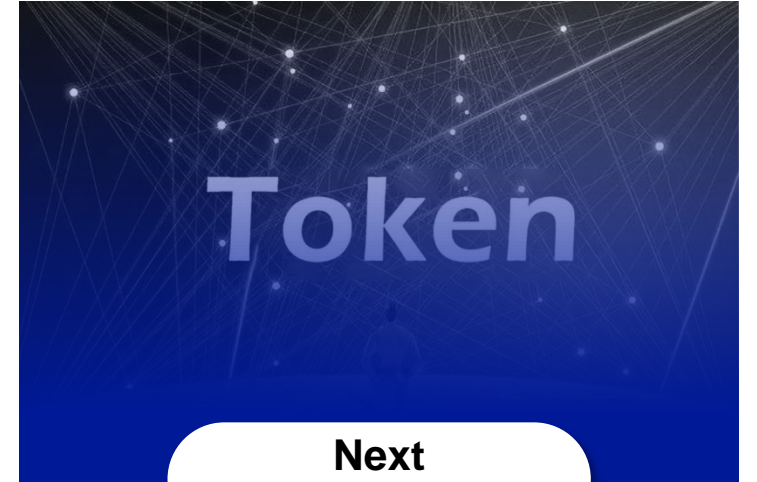
**Previous
Generation**

**Paper-based
Core Banking**



**Current
Generation**









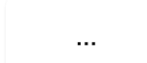





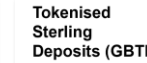
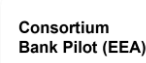
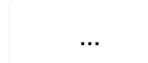






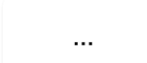
**Digital-based
Core Banking**



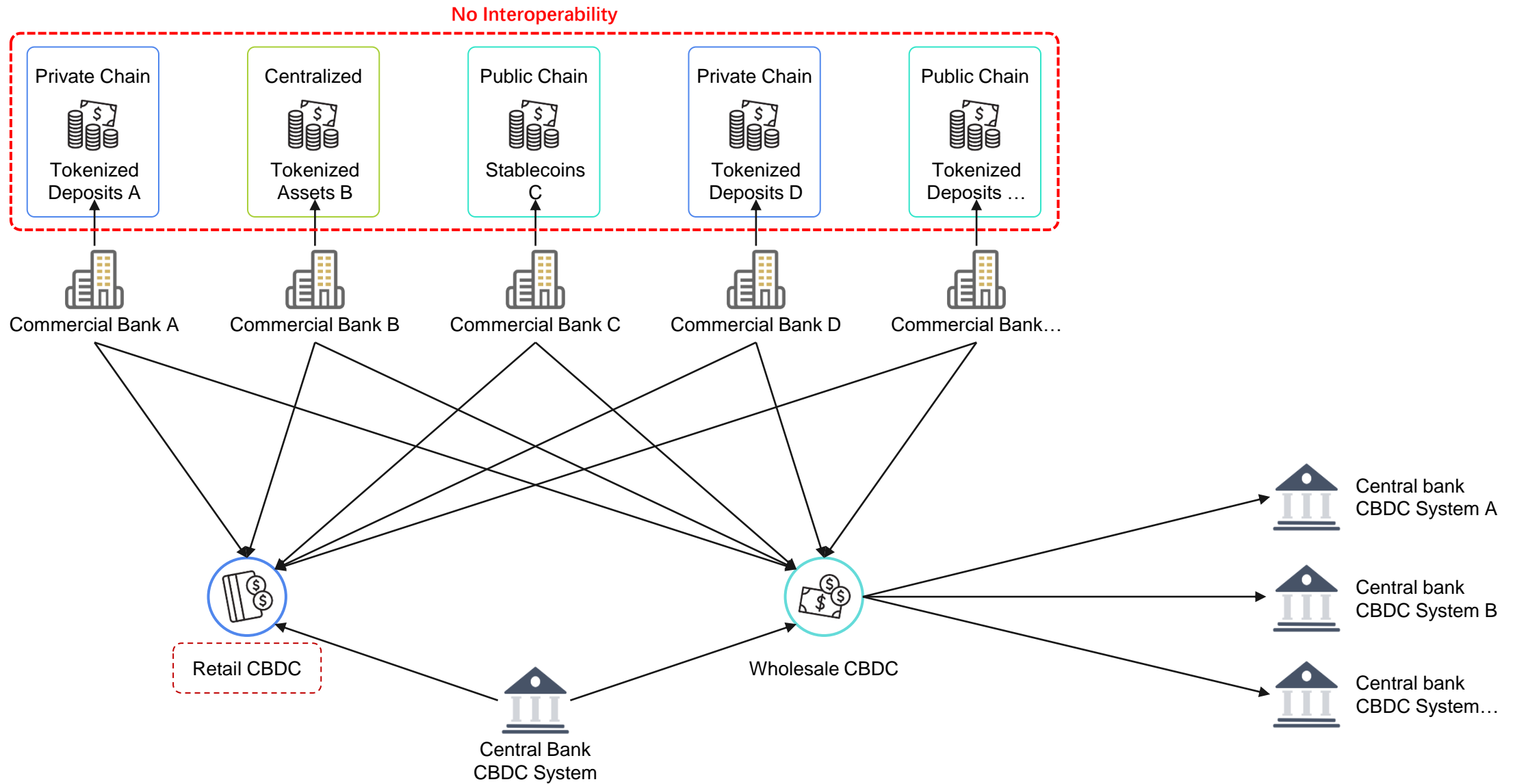
**Next
Generation**

**Token-based
Core Banking**

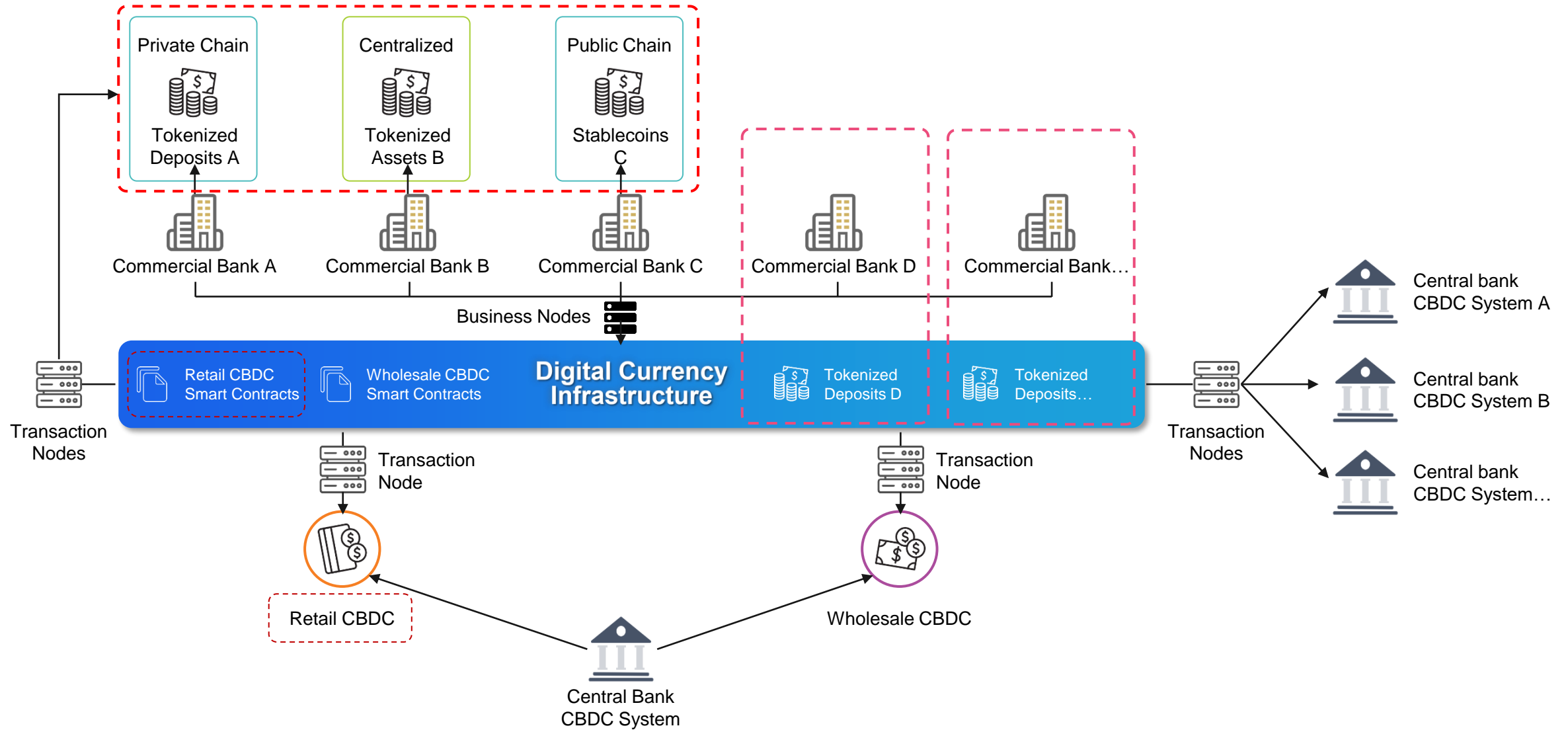
Tokenized Deposit vs. Stablecoin vs. Wholesale CBDC

	Stablecoin	Tokenized Deposit	Wholesale CBDC
Issuers/Liabilities	Non-bank Commercial Entities	Commercial Banks	Central Banks
Reserve	Full Reserve	Partial Reserve	No Reserve (Trust of the governments)
Regulation	Stablecoin Regulation	Banking Regulation	Legal Tender Legislation
Use Cases	Retail and BtoB payments, treasury management, cross-border payments	New bank accounts with better access, customer control, faster and cheaper settlements	Cross-border wholesale settlements
Visible Projects	<div>  USDC  PYUSD  USDT </div> <div>  FDUSD  EURC  EURE </div> <div>  EURCV  Euro-stablecoin  ... </div>	<div>  cbmt  J.P. Morgan Deposit Token (JPMoD)  THE REGULATED LIABILITY NETWORK </div> <div>  kinexys  DBS DBS Token Service  Tokenised Sterling Deposits (GBTD) </div> <div>  Consortium Bank Pilot (EEA)  ... </div>	<div>  Project Helvetia  Digital Rupee  HKMA - Project Ensemble </div> <div>  BIS Project Agorá  Project mBridge  Digital Dirham </div> <div>  ... </div>

Our Vision: Future Digital Currency Ecosystem in a Country











Our Vision: Future Digital Currency Ecosystem in a Country



The background is a dark blue field filled with a complex network of thin, light blue lines that radiate from various points, creating a sense of dynamic connectivity. Scattered throughout this network are numerous financial symbols in a lighter blue shade, including the Euro (€), the US Dollar (\$), the Japanese Yen (¥), and the Bitcoin (₿) symbol. Some of these symbols are larger and more prominent than others. Faint, semi-transparent numbers and strings of characters, such as '51583.83099' and '05309', are also visible, suggesting data or transaction values. The overall aesthetic is high-tech and digital, representing the intersection of finance and technology.

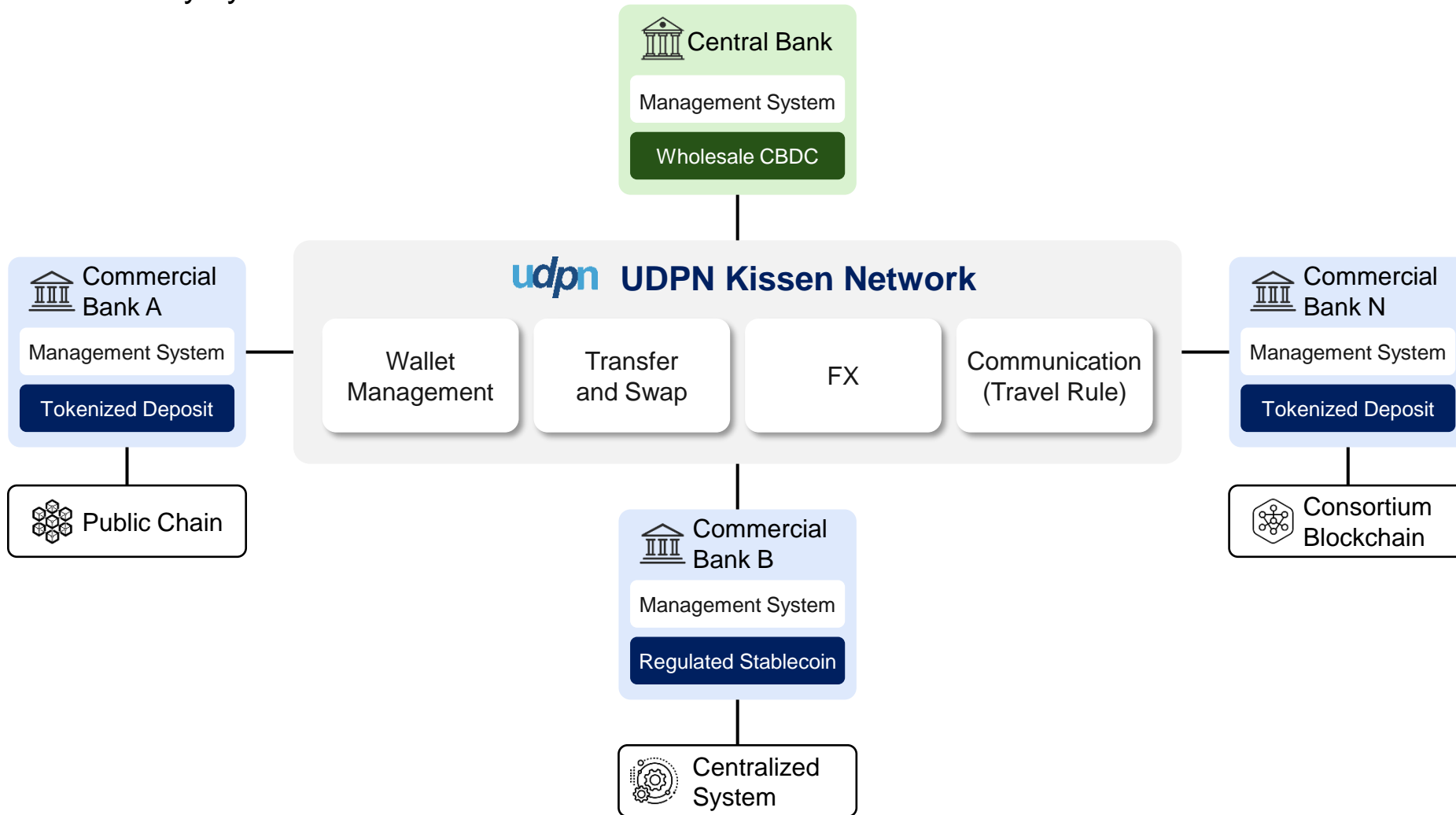
Token-based Settlement and Payment Networks

Four Models

	Decentralized Network Model	Unified Ledger Model	Virtual Unified Ledger Model	Intermediate Token Model
Project		   		 
Purpose	Payments, Remittances, and interbank settlements, FX services	Wholesale Settlements	Token-based inter-bank payments and settlements	Small-scale cross-border cross-institution settlements
Operator	Decentralized Governance	Single Entity	Planned Decentralized Governance	Intermedia Token Operator
Fiat Reservice (liabilities)	Central Bank for CBDCs, Commercial Banks for Tokenized Deposits	Not Currency	Commercial Banks	Intermedia Token Operators with Reserves
Currencies	G7 Currencies-focused: USD-EUR-SAR/GBP to start	All Currencies	EUR, USD, JPY (with space to add more)	USD
Status	Pre-production Sandbox Stage	Most in Experiential Stage	Sandbox Stage (by Nov 2025)	Active
Architecture	Each currency has its own token systems (blockchain or not) and the Network connects all of them with FX and Liquidity capabilities	Single blockchain system with same smart contracts to host all wallets, currencies and accounts.	Each bank can have its own token system on any blockchain, but with exactly the same standard of smart contracts. Each bank can open “convert wallet” in other banks’ systems for inter-bank transactions and settlements.	On-ramp off-ramp gateways for currencies to be converted into the intermedia tokens.
On-Premise Platform	Each issuing bank and commercial bank has its own on-premise portal and API gateway	A unified platform and portal	Each commercial bank has its own on-premises control panel to manage issuance and circulation, as well as settlements.	Gateway Model

Decentralized Network Model – UDPN Kissen Network

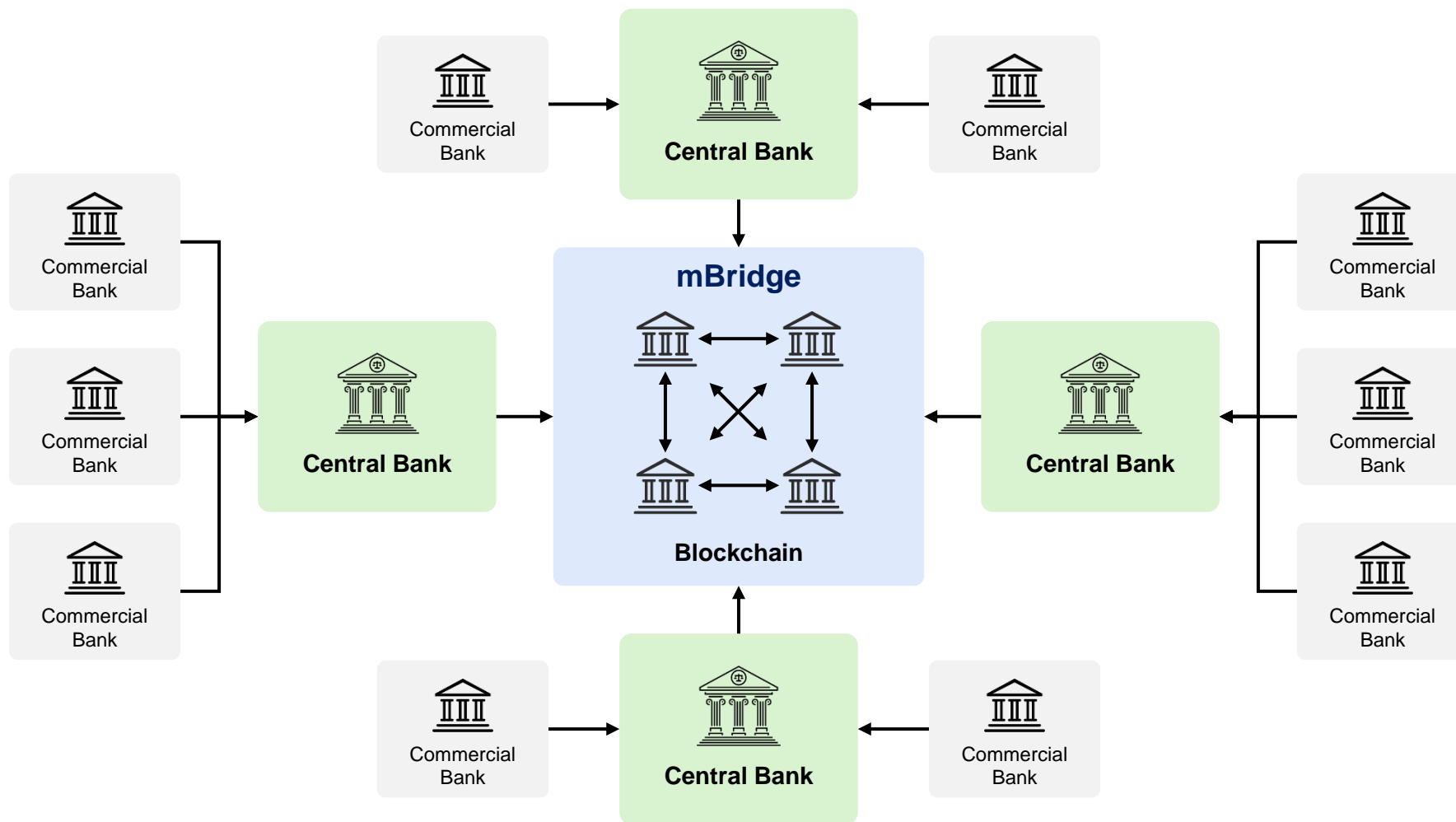
Kissen Network is a fully developed global settlement and payments network for regulated token-based digital currencies deployed on the UDPN. It is designed to connect independent commercial bank tokenized deposits and central bank digital currency systems.



Participants

- Custodian Banks
- Commercial Banks
- FX and Liquidity Providers
- JV Network Operator
- UDPN Alliance
- Service Providers

Unified Ledger Model – mBridge



THE REGULATED
LIABILITY NETWORK

MAS
Monetary Authority
of Singapore
Project Guardian
Wholesale Network Industry Group

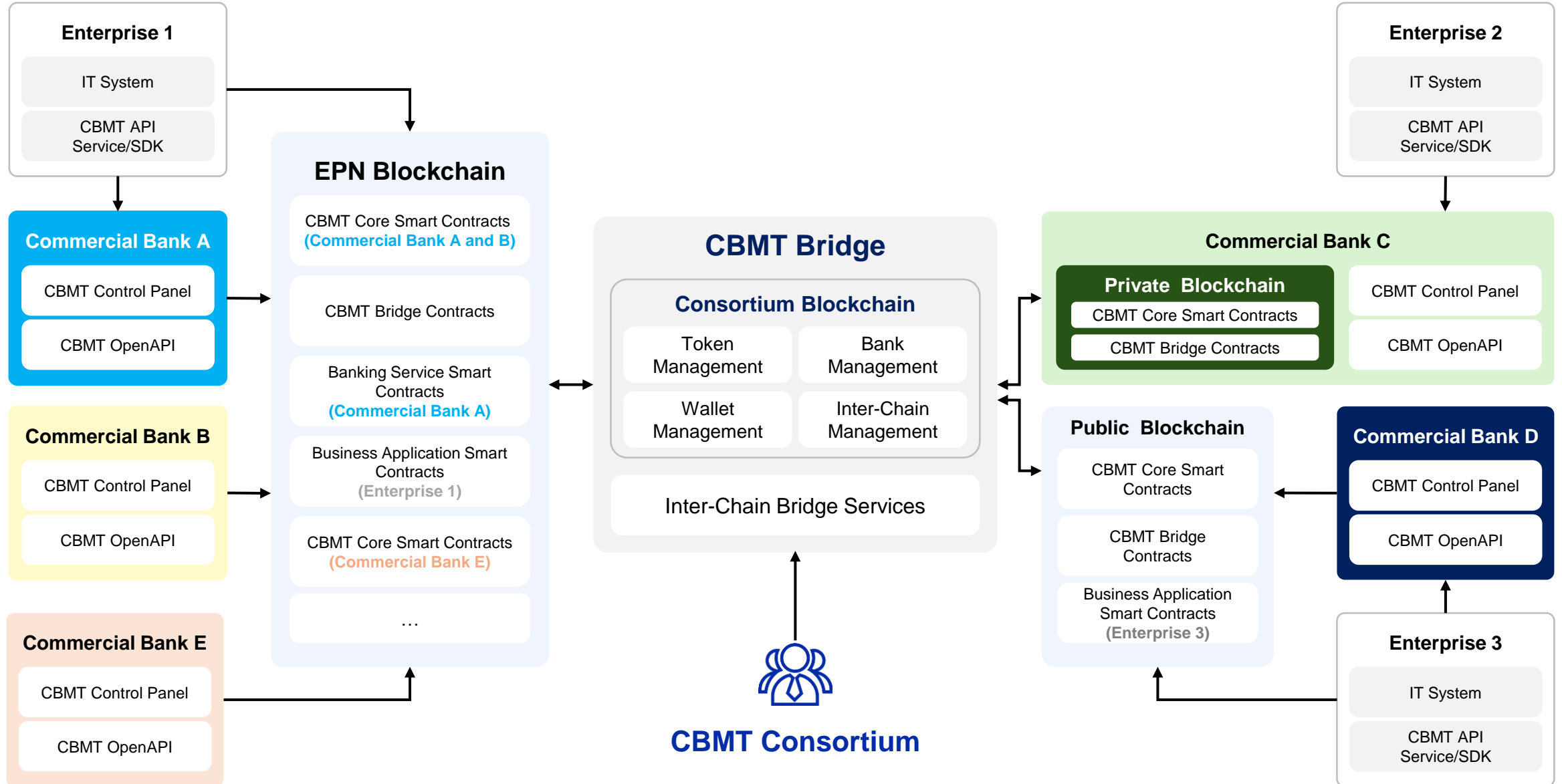
HONG KONG MONETARY AUTHORITY
香港金融管理局
Project Ensemble

BIS
Project Agorá

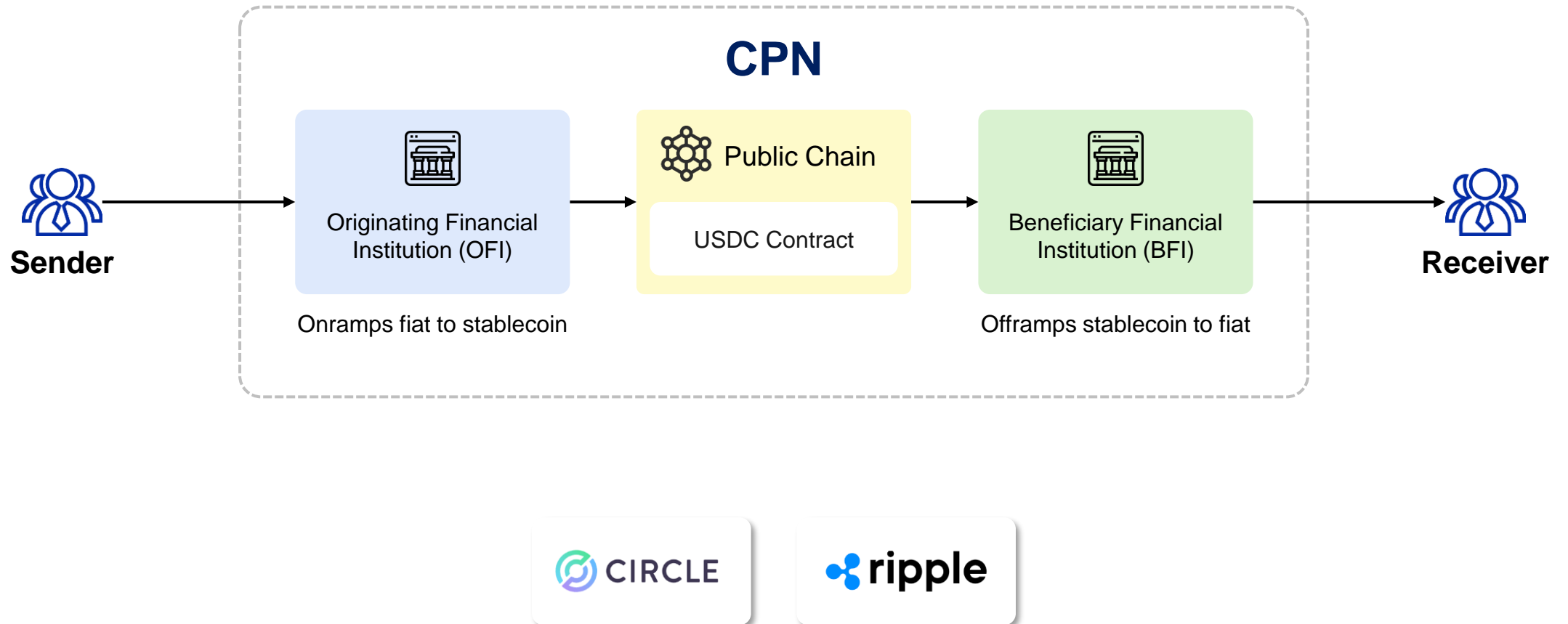
Swift
CBDC Sandbox Project

PARTIOR

Virtual Unified Ledger Model – CBMT



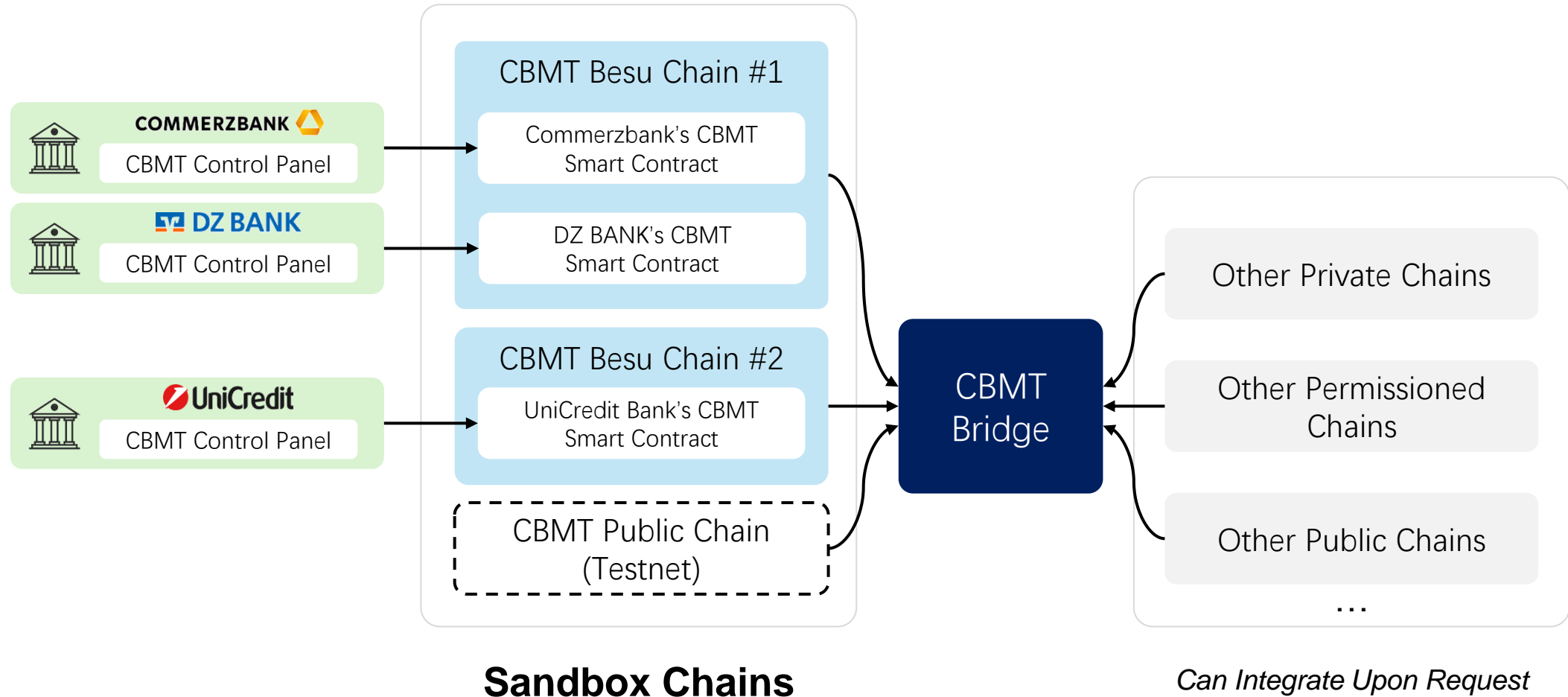
Intermediate Token Model – Circle Payments Network (CPN)



CBMT Sandbox

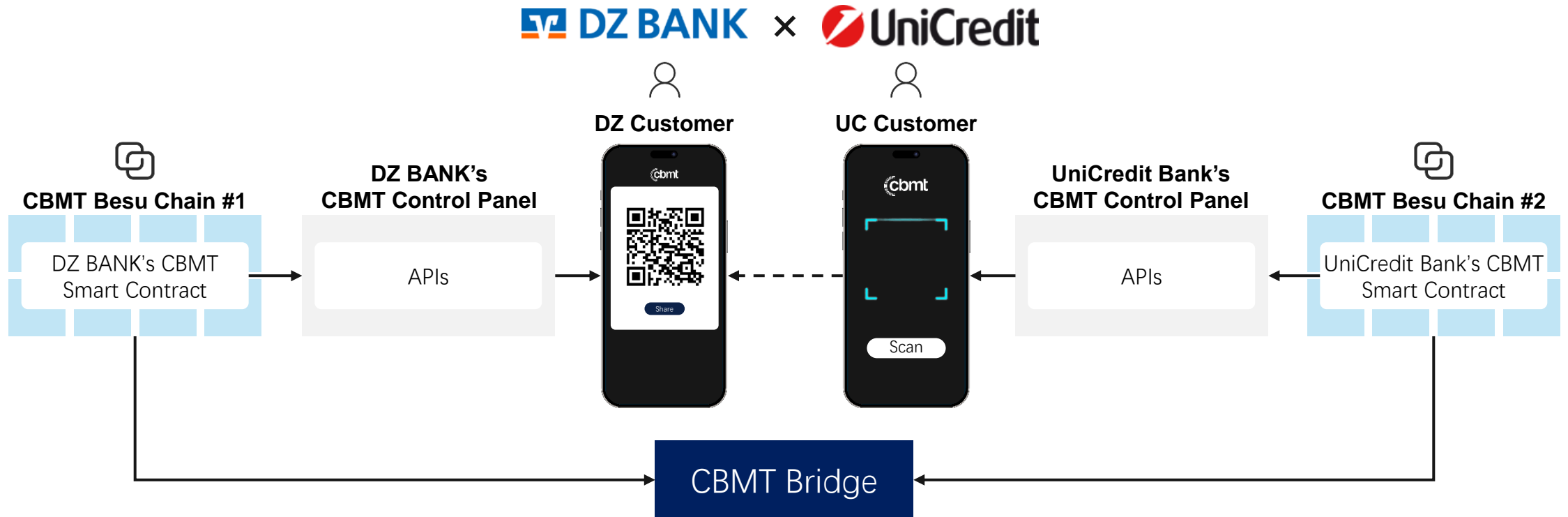
Demonstration and Use Cases

CBMT Architecture



Use Case #1: Cross-bank B2B Payments

Showcases a CBMT cross-bank B2B transaction between two customer wallets using the CBMT Mobile Apps of DZ Bank and UniCredit and sequentially illustrates how the two banks perform net and gross settlements. The CBMT smart contracts of the two banks are deployed on two different permissioned blockchains.

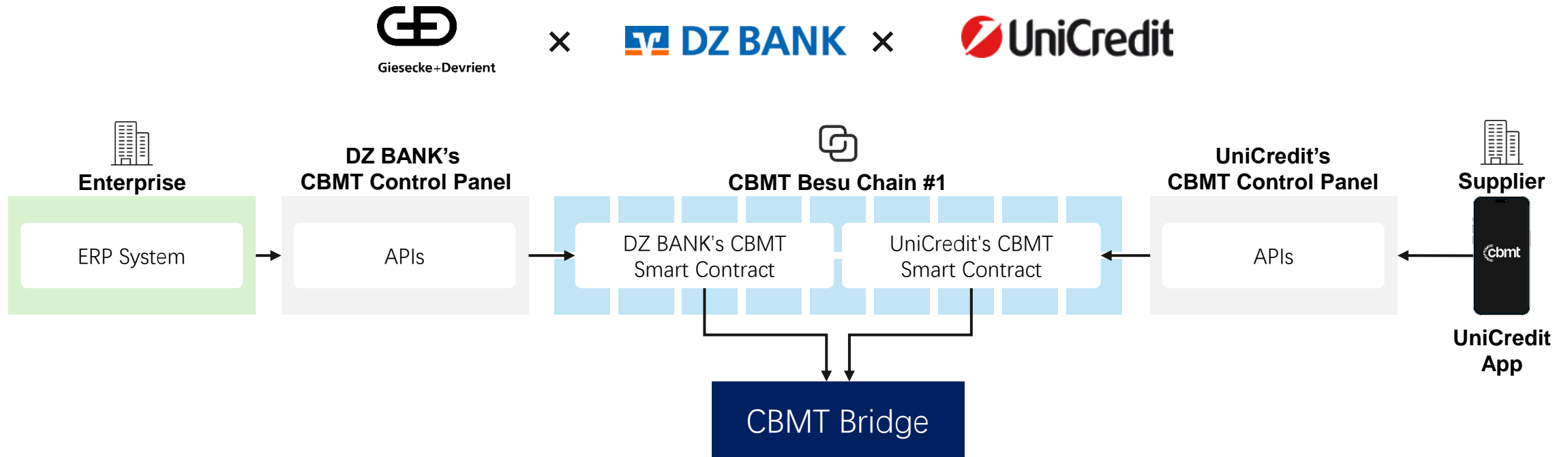




Discussion

Use Case #2: ERP Integration with CBMT Wallets

Demonstrates how an enterprise integrates the CBMT wallets directly into its ERP system via the APIs of its bank's Control Panel, enabling wallet creation, FX purchases, and fund transfers across any wallet within the CBMT ecosystem. The supplier can confirm incoming payments through another bank's mobile app.

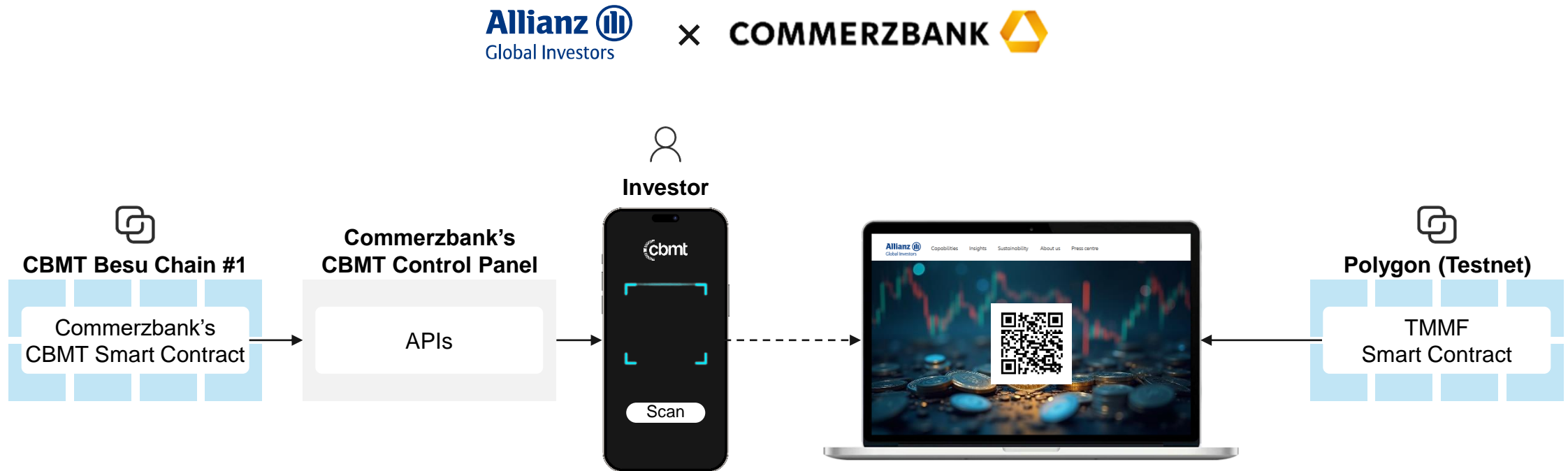




Discussion

Use Case #3: Cross-Chain DvP Digital Asset Settlements

Demonstrates how an investor purchases a tokenized money market fund deployed on a public chain and settles the trade using CBMT tokens on a permissioned blockchain under a DvP model.





Discussion

● CBMT Sandbox Roadmap



1

The third CBMT public chain and application smart contract access control.

2

Workflow and multi-signature control

3

Interest-bearing CBMT Wallets

4

Reporting and financial statements

5

Journal entries and posting

6

AML/CTF/Sanction screening and monitoring

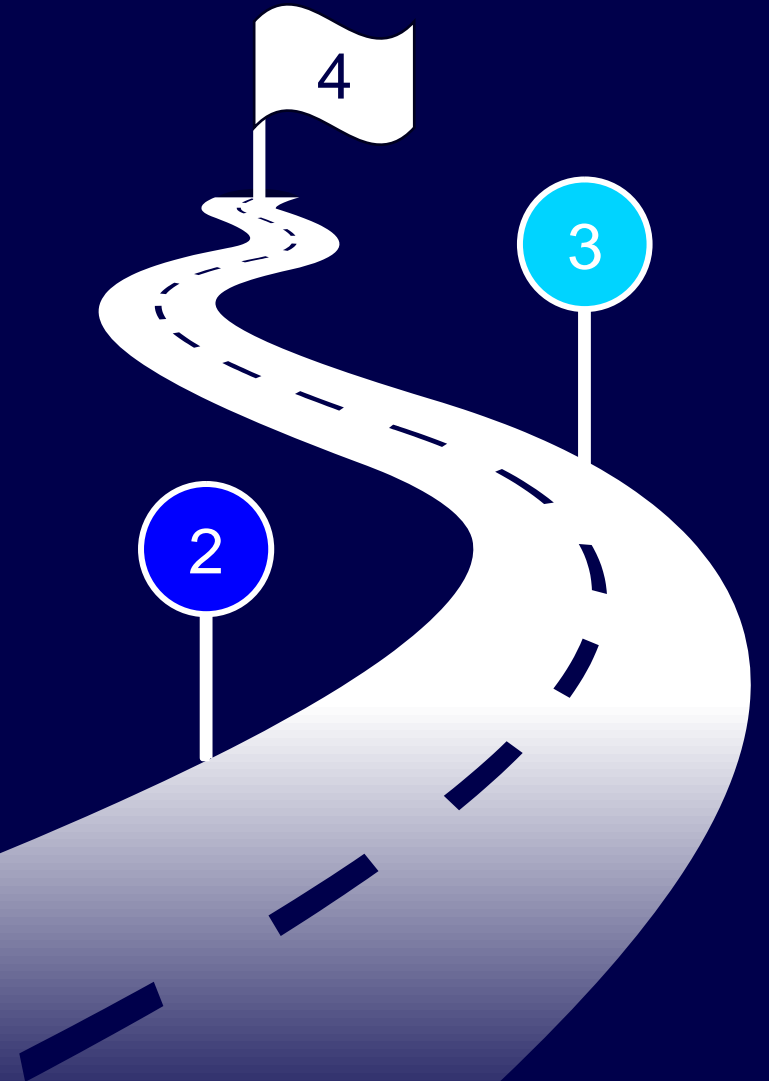
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Wallet and fund freeze/unfreeze



CBMT Initiative Roadmap

- ① POCs and regulatory alignment
- ② Expanding participation in the CBMT Sandbox
- ③ Real-money pilots
- ④ Production





Open Q&A and Closing Discussion

Thanks!

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Contact us to get more info
and schedule your demo:
filia@gi-de.com