



EUROPEAN CENTRAL BANK

EUROSYSTEM

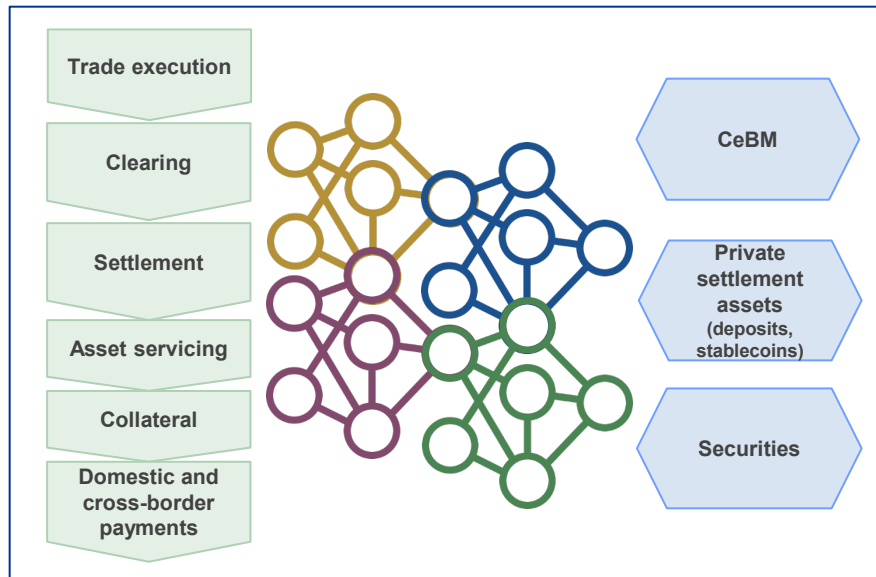
Insights on general approach of Appia and how to be involved



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ECB

To achieve vision of integrated ecosystem...



Market developments

e.g. single or multiple network landscape? What type of private settlement assets?

Technology & Standards

e.g. how to interconnect different networks?

Central bank operations & services

e.g. how to ensure control over assets and services on DLT?

...need to explore features and scenarios

Single work programme: Appia shapes Pontes enhancements



Market developments

- Analysis and monitoring
- Stakeholder engagement



Inform enhancements to prioritise in line with market needs

Technology & Standards

- Assessment and test of technological choices
- DLT standardisation



Inform standards and technology to adopt



Pontes

Central bank operations & services

- Test tokenised collateral
- Test tokenised CeBM provision on different networks
- Test shared network(s)



Inform new functionalities, services and/or infrastructures to

Work programme and stakeholder involvement

ABB: Appia Building Block



Public-private partnership...

Joint experiments, contribution to the analysis, standardisation workstream, etc.

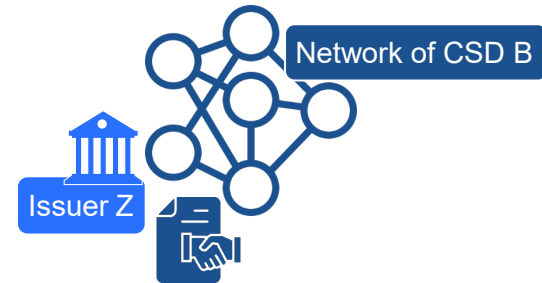
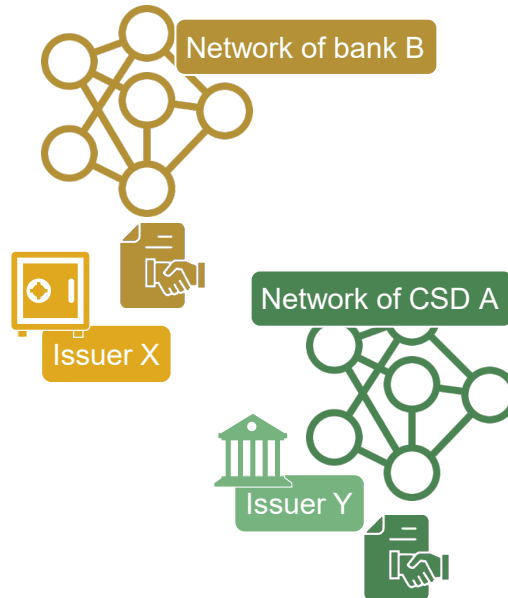
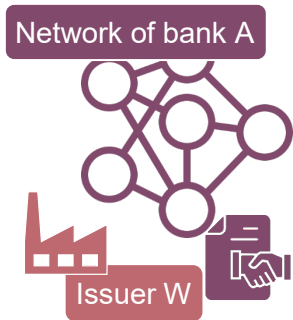


... with all relevant stakeholders

Market players, academics, public sector, other central banks

Siloed networks with limited interoperability lead to fragmentation

A few examples of ECB trials (out of 50+ cases tested)



No portability and usability of assets beyond network of issuance

Standardisation - domains



Data and semantics

- Data models and data exchange - representation of reference, transaction and holding data



Token - asset representation and lifecycle

- tokens (representation, rights, fungibility) and lifecycle logic (issuance, redemption, corporate events)



Transactions, interoperability & synchronisation

- settlement logic: transaction validation, consensus mechanism, irrevocability, finality, etc.)



Network governance and control

- operator, participant roles / responsibilities, access and interoperability, compliance



Legal environment

- governing network, operator, issuer, participant, asset / token