



EUROPEAN CENTRAL BANK

EUROSYSTEM

# Exhibitor Session

European Central Bank

30 September 2025

**Tokenised central bank money settled on DLT**  
Dimitri Pattyn and Holger Neuhaus



# Why committing to DLT settlement plans?

In line with its mandate, the Eurosystem is:



Preserving the **pivotal role of central bank money** in the financial system as safest settlement asset



Supporting the **safe development of the ecosystem**, with new market needs and market innovation



Maintaining the relevance of the Eurosystem in the **emerging technological financial market landscape**



Reinforcing the progression towards a digital **Capital Markets Union (CMU)** and **Savings and Investments Union (SIU)** in Europe

# Eurosystem exploratory work – our achievements



**Largest initiative** of such kind among central banks and **successful public-private** partnership

**64 stakeholders** (central banks, commercial banks, CSDs<sup>(1)</sup>, DLT Pilot Regime applicants) from **9 countries**



**Unprecedented number** of 50+ experiments and trials<sup>(2)</sup> with wide range of payments, securities **use cases covering full value chain beyond settlement**

See “[Comprehensive overview of trials and experiments](#)”



**High-level bond issuances**  
More than **200 real transactions**, **€1.6 bn** settled in six months

Engagement: 12 meetings of **NTW\*-Contact Group** and > 40 bilateral/multi-lateral market stakeholder meetings, each use case presented

*\*New Technologies for Wholesale settlement*

<sup>(1)</sup>Central Securities Depositories  
<sup>(2)</sup>Trials involved real-value transactions

# Turning findings into action: dual-track strategy



Exploratory work **confirmed market demand** and interest for DLT, with an active ecosystem evidenced in Europe



The **absence** of provision of central bank money is viewed as **major impediment** to the growth of the DLT ecosystem



Market participants expressed a preference for having **a single Eurosystem offering** within **a short time frame**



DLT represents an opportunity to **redesign** processes and practices, including the distribution of roles, across **the entire value chain**



A move to DLT has the potential to **address shortcomings** in today's ecosystem



The **active investigation** and adoption of DLT is accelerating **worldwide**

# Pontes (pilot) phase – scope



## Single and timely Eurosystem offering

One offering combining the features of the interoperability solutions used during [exploratory work](#)



## Use of DLT for connecting with market DLTs

Settlement of cash tokens on the Eurosystem DLT platform (or in the RTGS<sup>(1)</sup> component of T2<sup>(2)</sup>)



## Reliable interoperability mechanism

Delivery-versus-Payment (DvP) based on Hash-Link protocol<sup>(3)</sup>



## Settlement finality in T2 RTGS, later through cash token

Final central bank money settlement for the cash leg achieved once the corresponding settlement in T2 is completed



## DvP use cases and wholesale payments

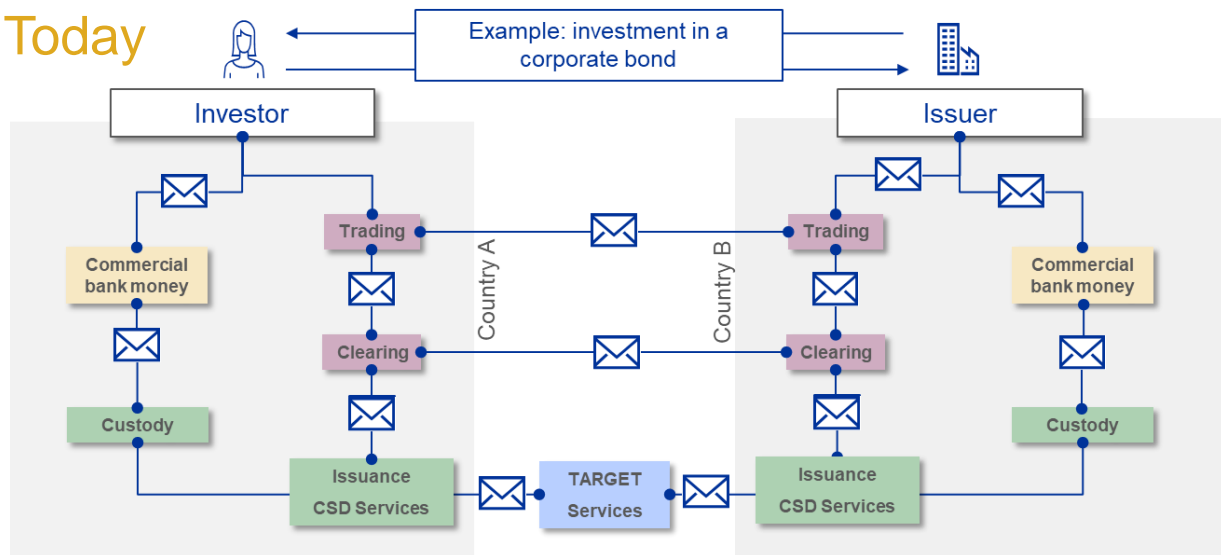
e.g. DvP for primary and secondary market operations of eligible assets available on eligible market DLT platforms

<sup>(1)</sup>Real-time gross settlement system

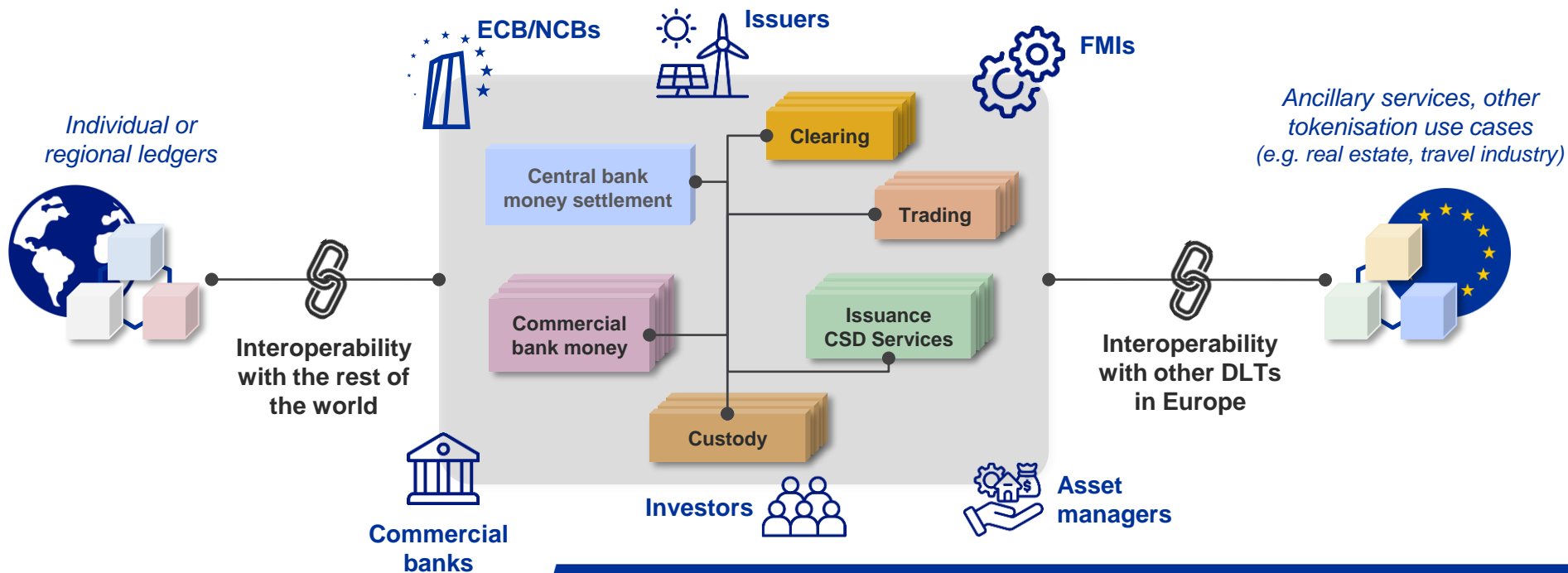
<sup>(2)</sup> Part of the TARGET Services <sup>(3)</sup>Interoperability component tested during the exploratory work

# Can DLT help simplify processes?

Today

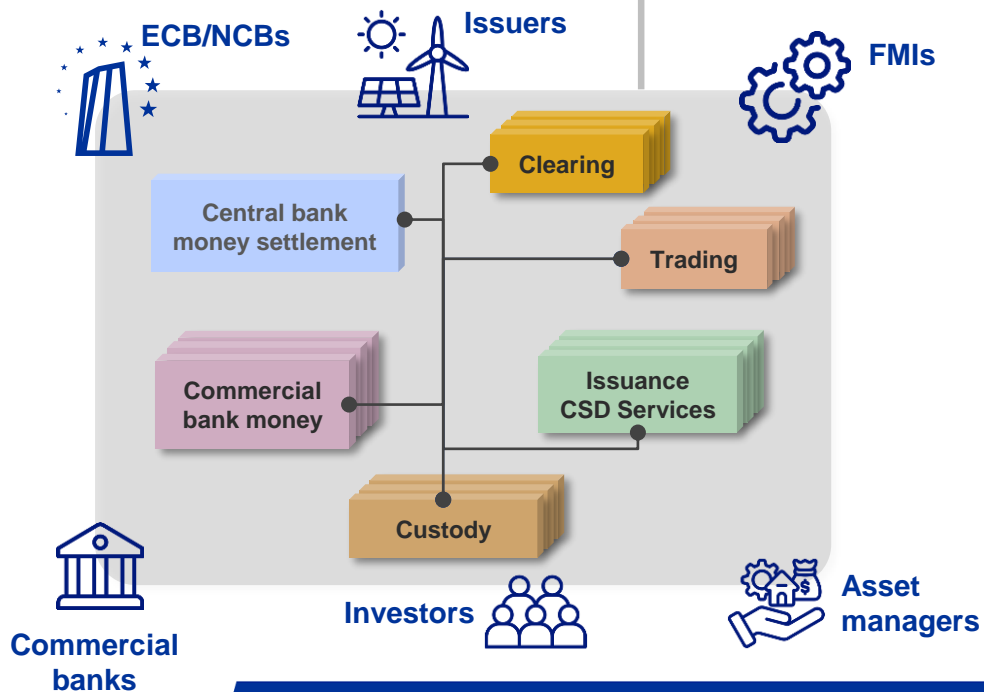


# Appia's vision – seamless app integration?



# Appia a road to a shared ledger or full interoperability?

Key question: **Single ledger, interoperable ledgers, or both?**  
Approach of Appia: **Outcome-driven exploration**







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See speech by Piero Cipollone “Towards a digital capital markets union” (Oct. 2024)



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