



EUROPEAN CENTRAL BANK

EUROSYSTEM

Update on the Eurosystem  
exploratory work on new  
technologies for central bank  
money settlement of  
wholesale financial  
transactions

Joint AMI-Pay and SeCo



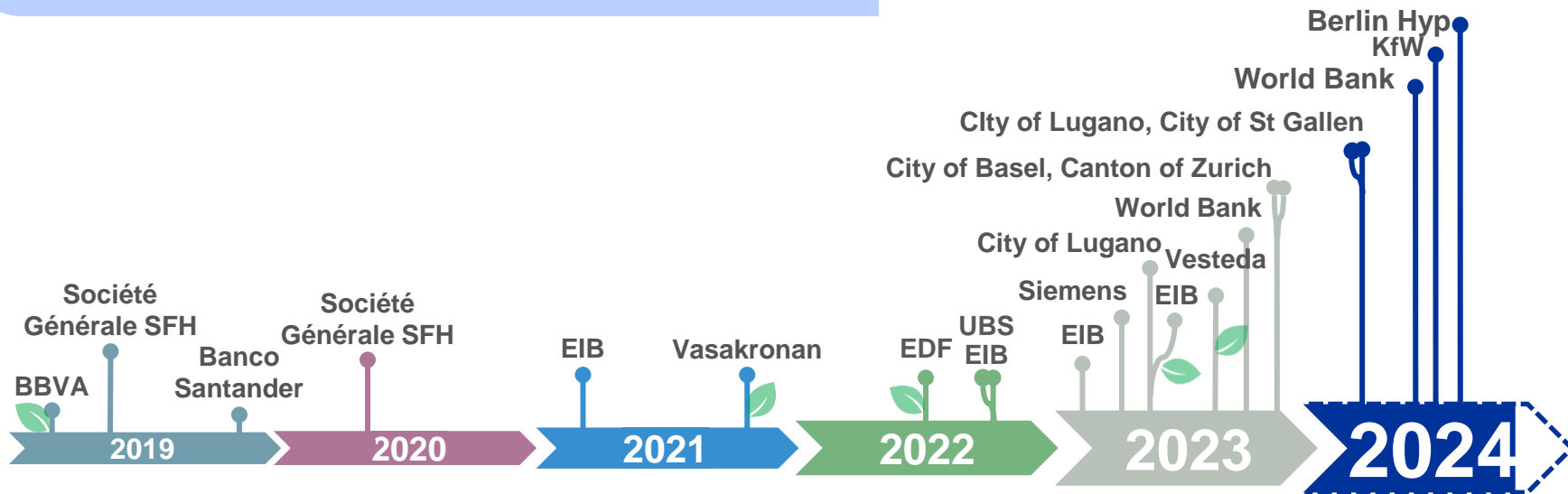
5 December 2024

Holger Neuhaus  
DG-MIP MI<sup>2</sup>

# DLT Securities Market Activity in Europe

High profile digital bond issuances – real transactions

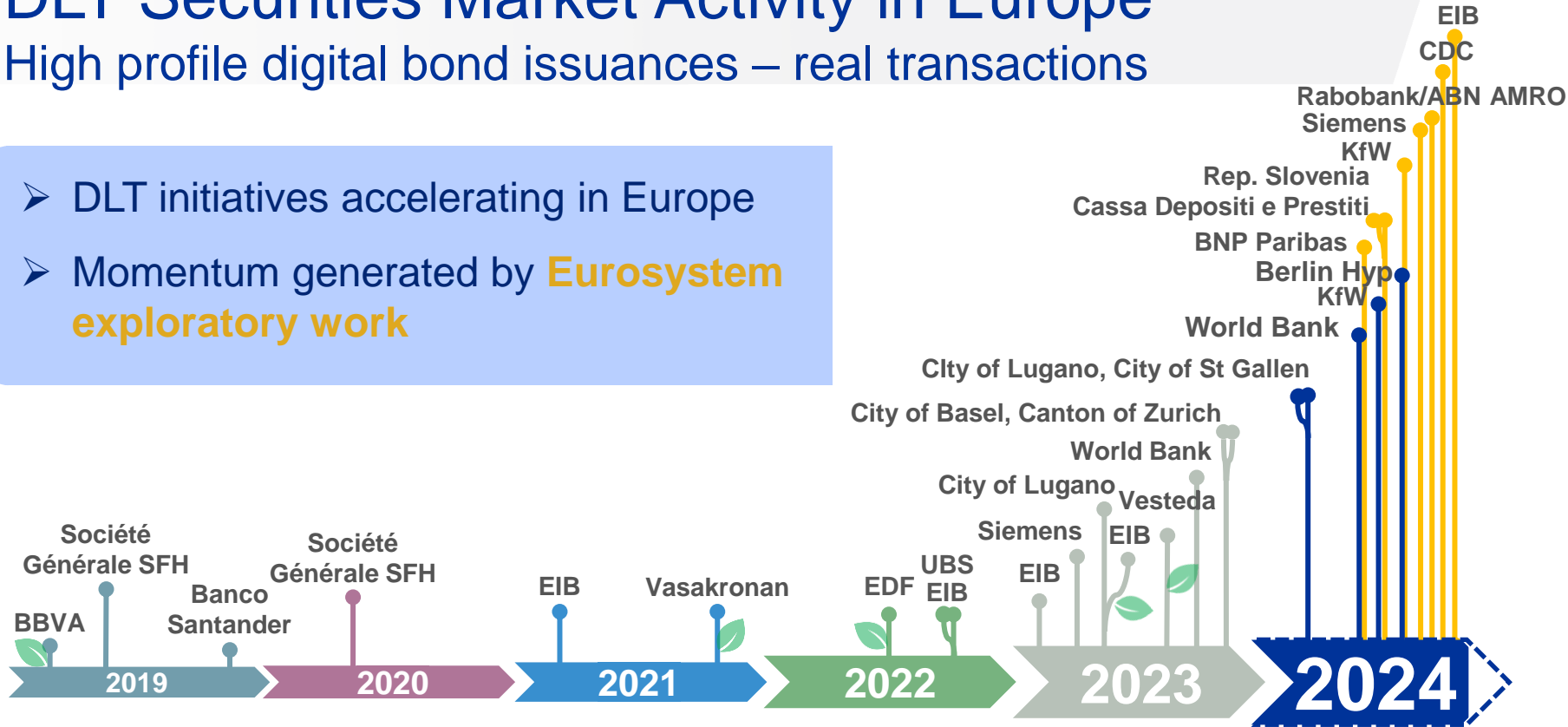
➤ DLT initiatives accelerating in Europe



# DLT Securities Market Activity in Europe

High profile digital bond issuances – real transactions

- DLT initiatives accelerating in Europe
- Momentum generated by **Eurosystem exploratory work**



# Eurosystem objectives



**Continued use of EUR central bank money (CeBM) as settlement asset on wholesale markets and as anchor of a two-tier monetary system**



**Promoting strong, stable and integrated European payments and capital markets**

Fostering digital CMU (see [7 March GovC statement](#) and [7 Oct PC speech](#))



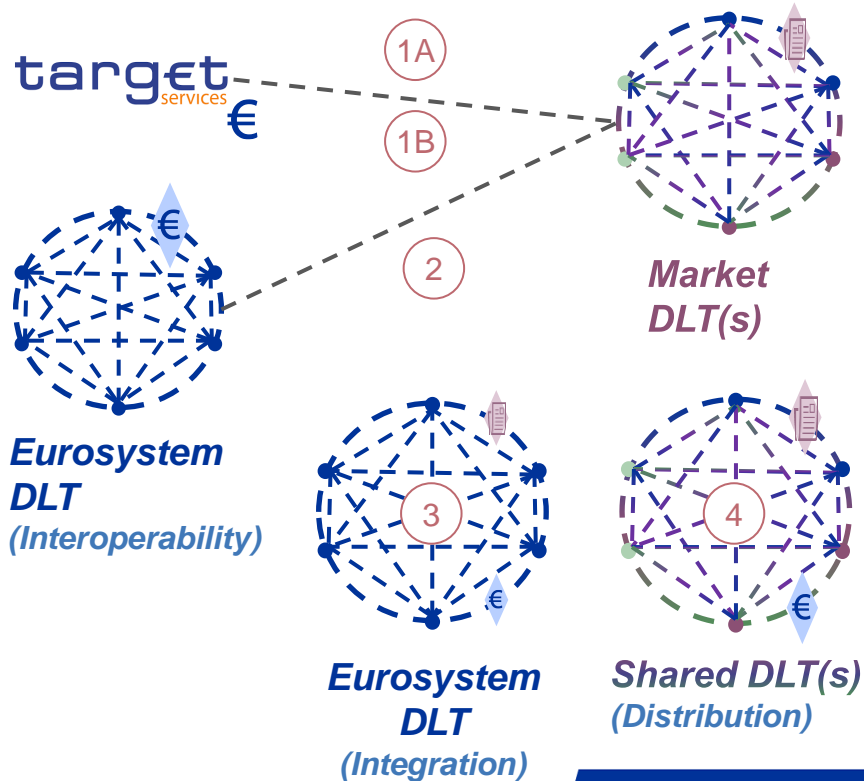
**Safeguarding open strategic autonomy and promoting international role of the Euro**



**Supporting industry innovation in Europe in line with sustainability goals**

Contributing to the financing of the EU green and digital transition

# CeBM cash leg for settlement of transactions on DLT



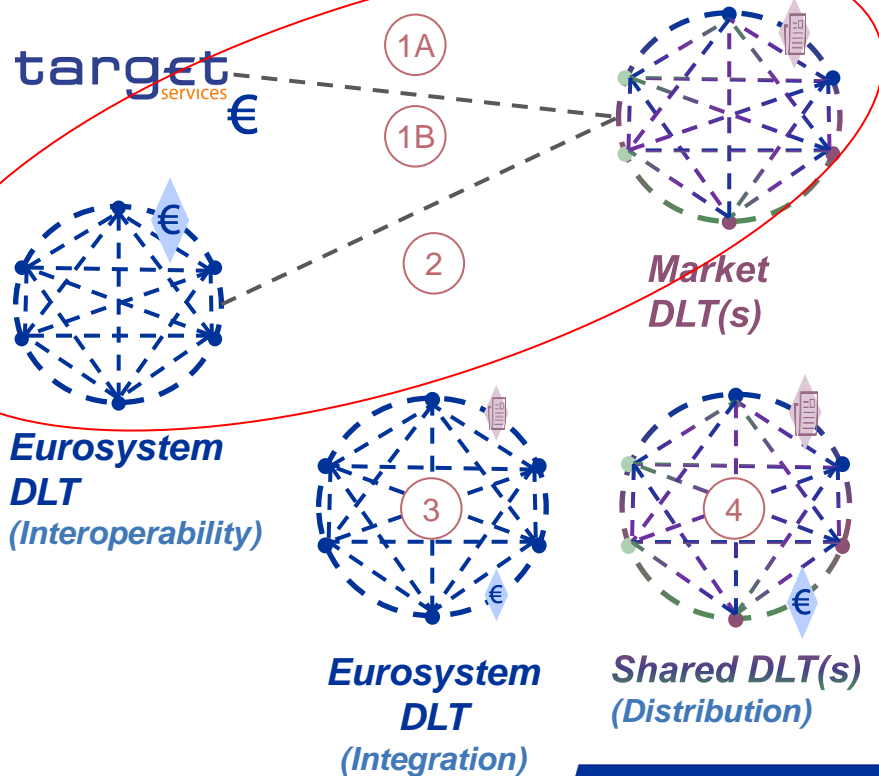
1. CeBM settlement in current TARGET Services through adding a (A) *Trigger component to T2* or (B) *Bridge component to TIPS-like platform*

2. CeBM settlement on Eurosystem DLT interoperable with market DLTs (*Interoperability*)

3. CeBM and **securities** settlement on own Eurosystem DLT ('T2S DLT') (*Integration*)

4. CeBM and **securities** settlement on DLTs shared between Eurosystem and other stakeholders (*Distribution*)

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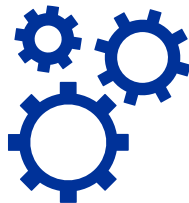
3. CeBM and securities settlement on own Eurosystem DLT ('T2S DLT') (*Integration*)

4. CeBM and securities settlement on DLTs shared between Eurosystem and other stakeholders (*Distribution*)

# Eurosystem exploratory work - scope

Eurosystem ongoing 6 month exploratory work :

- 1A - **Trigger Solution** by Deutsche Bundesbank ([link](#))
- 1B - **TIPS Hash Link** by Banca d'Italia ([link](#))
- 2 - **Full-DLT Interoperability** by Banque de France ([link](#))



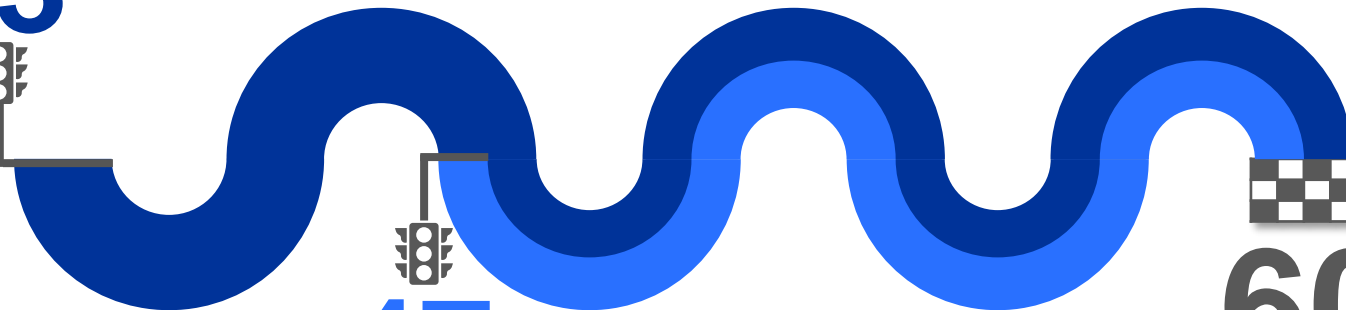
- **Experiments:** mock settlement
- **Trials:** actual settlement in central bank money of transactions only for securities

N.B. Exploratory work does not constitute a commitment by the Eurosystem to provide any steady-state solution(s) in the future or to make any changes to its current infrastructure.

# Participation in waves

13 May 2024

**13** stakeholders\* in wave 1



**47**



stakeholders\* in wave 2



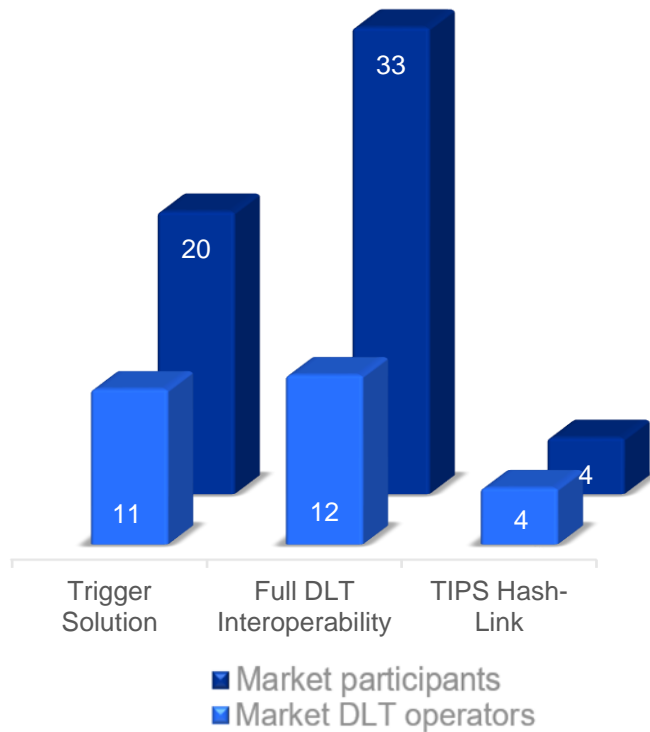
**60**  
in total

29 November 2024

\* including market participants, market DLT operators



# Participation types



\* market stakeholder can participate with both the roles of market participant and market DLT operator







# Broad range of use cases explored



## Securities

-  Primary issuance of bonds by financials, corporates and a sovereign, and settlement with DvP, full lifecycle
-   Primary issuance of commercial paper
-   Secondary market transactions
-  Intraday repurchase agreements
-  Overnight repurchase agreements of issued securities
-   Coupon payment and redemption of tokenised securities

## Payments (international / domestic)

-  Margin calls managed by smart contracts
-  Automated wholesale payments (intraday settlement)
-  Interbank deposit token transfers with related settlement in central bank money
-  Settlement of payments related to interest rate swaps via smart contracts
-  Interbank reconciliation of bilateral accounts with settlement of outstanding balances in central bank money
-  Cross-currency PvP transactions with another central bank



\*Experiments



\*Real settlement

# Success of Eurosystem exploratory work

## Facts and figures

- 40+ exp. and trials
- 60 market stakeholders from 9 jurisdictions
- Globally leading DLT Central Bank Money initiative
- Entire value chain participating
- Incumbents and new entrants

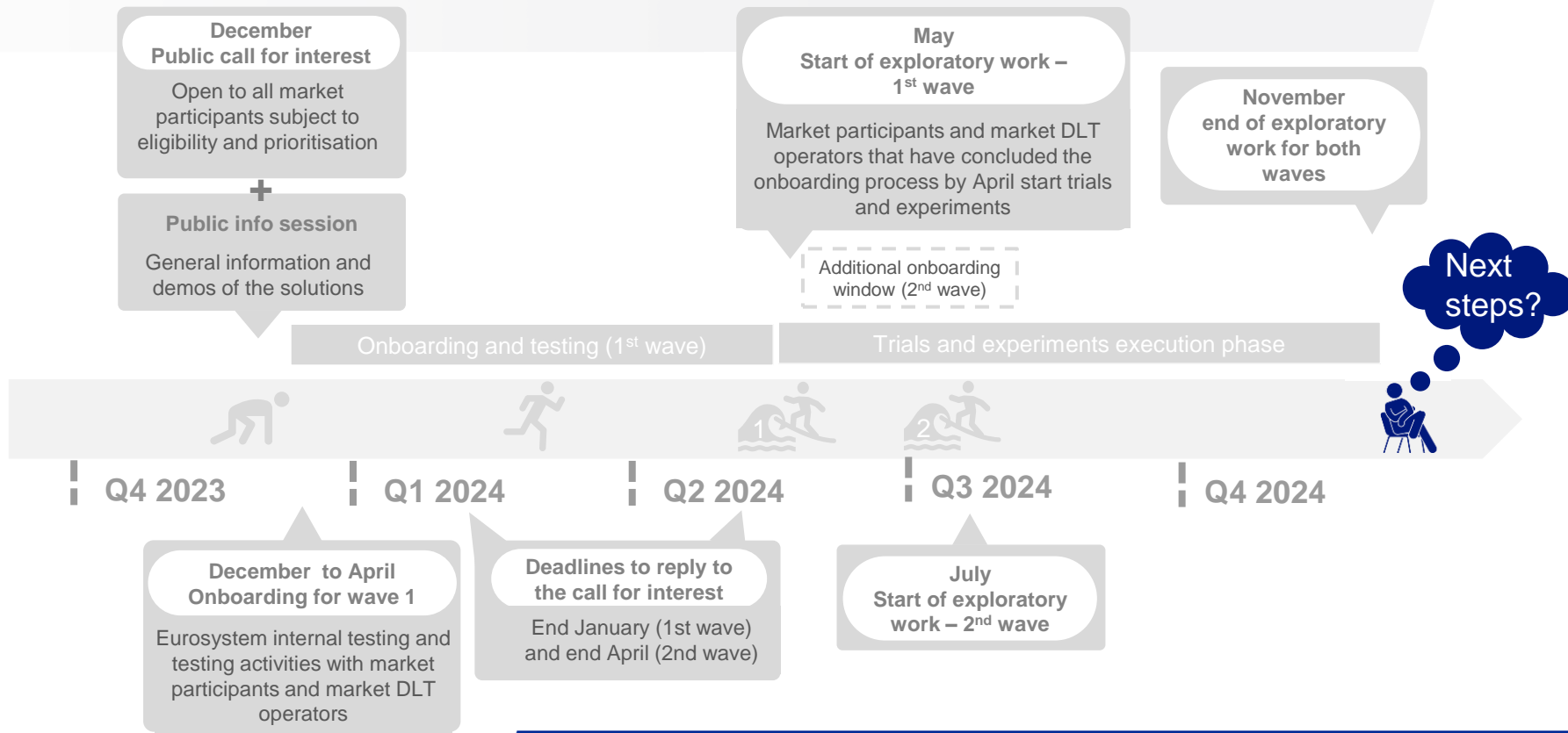


Eurosystem trials  
and experiments

## Preliminary learnings

- DLT opportunities to increase efficiency and reduce costs
- Scope of DLT beyond capabilities of current settlement Financial Market Infrastructures (entire value chain)
- Successful public-private partnership
- Market demand for Eurosystem to continue with clear roadmap

# Eurosystem's exploratory work – timeline



# And now?

Evaluation of the lessons  
learned...

...and conclude on next  
steps.



# Further information

For more information, please visit the ECB's exploratory work [webpage](#)

## Latest publications of the ECB:

[Towards a digital capital markets union](#): Keynote speech by Piero Cipollone

[Economic Bulletin article](#): Central bank money settlement of wholesale transactions in the face of technological innovation

[Payments news](#): Eurosystem's exploratory work on DLT platforms progressing

## Contact points:

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➤ Banca d'Italia for the TIPS Hash-Link: [target.services@bancaditalia.it](mailto:target.services@bancaditalia.it)

➤ Banque de France for the Full-DLT Interoperability: [monnaie-innovation@banque-france.fr](mailto:monnaie-innovation@banque-france.fr)