New technologies for wholesale central bank money settlement
ICA-TF

4 October 2023
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Overview

1. Rationale for Eurosystem exploratory work
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Rationale for Eurosystem exploratory work
With distributed ledger technologies, money, securities or any other digital asset could be recorded on a shared network in the form of tokens.

CSDs, central banks, and commercial banks jointly share the roles of bookkeepers and operators of market infrastructures.

Potential benefits put forward: atomicity, (decentralised) programmability and ease of reconciliation.
Implications of industry DLT uptake

Current TARGET Services: settlement of payments in € central bank money as well as integrated securities settlement in T2S

1. With tokenisation, securities can be recorded and settled on Distributed Ledger Technology

2. Risk of market fragmentation if multiple DLT platforms co-exist in the long-term but lack interoperability

3. Risk that central bank money loses relevance as wholesale settlement asset if no (timely) solution is provided
Selected solutions for experiments and trials
Next step - further the analysis through exploratory work

Ad hoc limited trials and experiments

Settlement of transactions in live (PROD) environment

Settlement of transactions in test (UTEST) environment

- Exploratory work would focus both on Delivery-versus-Payment and Payment-versus-Payment
- The Eurosystem will minimise any potential impact of the exploratory work on TARGET Services

PRESS RELEASE

Eurosystem to explore new technologies for wholesale central bank money settlement

28 April 2023

- Exploration of potential solutions for central bank money settlement of wholesale financial transactions recorded on distributed ledger technology (DLT) platforms
- New market contact group to foster dialogue and information exchange with industry
CeBM cash leg for settlement of transactions on DLT – five conceptual solutions

1. CeBM settlement in current TARGET Services through adding a Trigger / Bridge component

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)
Achieving the Eurosystem objectives vis-à-vis meeting market demand

Balanced approach to achieve Eurosystem objectives
- Improve the Eurosystem’s knowledge of the different solutions
- Gain consistent and coordinated market feedback
- Meet market demand for CeBM solutions during the DLT Pilot Regime
- Avoid DLT ecosystems being built around stablecoins only

Focus on the Interoperability-type solutions
- with cross-platform settlement

Ad hoc limited trials and experiments
- intraday only, limited volumes and values settled
- without committing the Eurosystem to adopt a long-term response
Timeline
Draft timeline for 2024 exploratory work

**Onboarding and testing (1st wave)**
- **November**: Public call for interest
  - Open to all market participants subject to eligibility (beyond NTW-CG members)
- **Q1 2024**: Deadlines to reply to the call for interest
- **May**: Start of exploratory work - 1st wave
  - Participants that have concluded the onboarding process by April start trials and experiments
- **December**: Beginning of testing
  - Interested market DLT operators and participants, which have already reached out to the Eurosystem, conduct testing with the Eurosystem for chosen solution(s)

**Trials and experiments execution phase**
- **Q2 2024**: Participants that have concluded the onboarding process by April start trials and experiments
- **Q3 2024**: End of exploratory work for all participants
- **Q4 2024**: Additional onboarding window (2nd wave)
  - January (1st wave) and April (2nd wave)

**Other dates**
- **November**: Public call for interest
- **May**: Start of exploratory work - 1st wave
- **November**: End of exploratory work for all participants

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Annex: Operational aspects & further info on solutions
In scope of Eurosystem exploratory work:

- **Trigger solution** of Deutsche Bundesbank ([link 1](#); [link 2](#))

- **TIPS Hash-Link solution** of Banca d’Italia ([link](#))

- **Full-DLT Interoperability solution** of Banque de France ([link 1](#); [link 2](#))
Interoperability solutions in trial design

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