



TOPICS:

Technology

SOURCE:

European Central Bank

ECB: Appia - Paving the Way for a Future-Ready, Integrated Financial Ecosystem Leveraging Tokenisation and DLT

- The Eurosystem recently published the roadmap for **Appia**, a strategic initiative to integrate **distributed ledger technology (DLT)** and **tokenisation** into wholesale financial markets.
- The Appia initiative follows exploratory work conducted in 2024 involving 64 market participants and more than 50 experiments testing new technologies for **wholesale settlement**. Based on these findings, the ECB Governing Council in 2025 approved a programme consisting of two complementary components: **Pontes**, which provides near-term interoperability between DLT platforms and existing Eurosystem infrastructures for settlement, and **Appia**, which focuses on developing a long-term blueprint for a fully integrated tokenised financial ecosystem.
- The initiative pursues **several strategic objectives**. First, it aims to **preserve central bank money as the anchor of the financial system**, ensuring the effective transmission of monetary policy and safeguarding financial stability within tokenised markets. Second, it seeks to **promote a more integrated, competitive and innovative European financial ecosystem** by leveraging DLT capabilities such as programmable transactions, automated settlement through smart contracts, and continuous (24/7) operation. Third, Appia supports **European strategic autonomy and resilience** by reducing dependence on foreign financial infrastructures or technologies. Finally, it aims to **enhance the international role of the euro** by enabling more efficient cross-border

financial services and settlement mechanisms.

- To achieve these objectives, the Eurosystem proposes a conceptual framework in which DLT infrastructure operates as a shared network supporting multiple financial assets and services. The analysis explores alternative configurations, including a **single shared DLT network** or **multiple interoperable networks**, each capable of hosting tokenised assets, settlement services, and programmable financial contracts. Governance, operational control, interoperability standards, and legal compliance are identified as key design considerations.
- The Appia programme is structured around **six analytical building blocks**, including asset interoperability standards, DLT-based monetary policy operations, tokenised central bank money infrastructure, cross-border connectivity, legal and regulatory adaptation and implementation strategies. These workstreams involve collaboration with market participants, regulators and international stakeholders: the Eurosystem invites public and private sector stakeholders to provide feedback (by the 22nd of April 2026) on the approach set out in the Appia roadmap. The Eurosystem plans to deliver a **comprehensive blueprint for the future tokenised financial ecosystem by 2028**, while Pontes will begin enabling DLT transaction settlement through existing infrastructure from 2026.

