Post-trade process efficiency: T+1 and future evolutions

The Chair noted that post-trade process efficiency is a key component of the competitiveness of European capital markets. Two main drivers are expected to support further efficiency gains: the development of distributed ledger technology (DLT), with the potential to enhance operational efficiency, automation and legal certainty in post-trade processes; and the implementation of the T+1 settlement cycle. The transition to T+1 represents a significant transformation of the post-trade landscape, expected to accelerate the settlement process, reduce counterparty risk and improve liquidity efficiency.

1. DLT and tokenization: opportunities and challenges

1.1 DLT experimentation and on-going adoption in the post-trading space

A regulator highlighted a clear gap between expectations regarding the DLT pilot regime and its actual level of deployment so far. While experimentation has been extensive, including initiatives such as the issuance of tokenised government and corporate bonds, the regime has not reached meaningful scale, with only six infrastructures registered across the EU. This is due to structural constraints of the regime, notably restrictive volume thresholds, and the limited availability of settlement assets, which have kept most initiatives at an experimental stage. Recent proposals made in the context of the Market Integration and Supervision Package (MISP), aim to improve the pilot regime in order to support the broader uptake of DLT solutions in the post-trading space.

An industry speaker welcomed the MISP proposals on the DLT pilot regime, particularly the review of thresholds and the extension of the pilot regime in terms of asset eligibility and the range of participating platforms.

Another industry speaker provided a perspective from a major market infrastructure active in both the US and Europe, drawing on over a decade of experience in DLT and tokenisation and on the recent transition to T+1 in the US. A decade of DLT experimentation has culminated in the integration of digital asset capabilities within their group, reflecting a strategy aimed at bridging traditional financial infrastructure services with emerging decentralised DLT-based ecosystems. In the US, a major milestone has been the recent regulatory approval for their firm to launch tokenisation services for a selected set of US assets, including equities, ETFs and government securities, allowing these assets to be issued and managed within a secure and regulated permissioned blockchain environment. Structured initially as a three-year pilot, this initiative is a first step towards enabling US capital markets to operate on-chain with 24/7 connectivity. Given the global role of US markets, this development is expected to have broader implications for other markets interacting with the US.

An official emphasised the role of central bank initiatives in supporting the integration of DLT-based assets into existing financial infrastructures. A key development is the eligibility of certain DLT-based assets, provided they comply with collateral eligibility criteria, as collateral for Eurosystem refinancing operations. In a first step, assets issued via DLT components of existing CSDs have become eligible to be mobilised through traditional channels as of the end of March 2026, reflecting a pragmatic approach that builds on existing infrastructures. In a second phase, the Eurosystem is examining the conditions under which natively issued DLT assets, not represented within traditional securities settlement systems, could become eligible as collateral. This requires careful assessment of operational, legal and risk aspects and is expected to follow a gradual, stepwise approach.

1.2 Efficiency gains and market opportunities from DLT and tokenisation

A regulator stated that DLT offers significant potential benefits for post-trade processes. DLT enables end-to-end digital lifecycles, programmable settlement and greater automation, which, combined with tokenisation, can streamline and accelerate the issuance, transfer and safekeeping of securities. Beyond back-office efficiency, DLT can also support the broader objectives of the Savings and Investments Union (SIU). Greater adoption could help channel more savings into productive investments by attracting digitally savvy investors, particularly those seeking more flexible and accessible investment opportunities.

An industry speaker highlighted that tokenisation offers major opportunities. The conversion of traditional assets into digital form has the potential to transform post-trade economics by enabling instantaneous and continuous collateral mobility and the ability to finance positions around the clock. Tokenisation also introduces additional flexibility through real-time transfers and connectivity to blockchain ecosystems, allowing securities to be distributed and accessed across multiple networks, thereby enhancing liquidity and market depth, while preserving integrity and safety. This will allow market participants to benefit from new DLT-based ecosystems, while continuing to rely on the liquidity of existing market infrastructures. The approach is therefore designed to augment rather than replace existing systems, enabling firms to adopt tokenisation without full system re-engineering.

1.3 Interoperability challenges and enabling initiatives

A regulator stressed that the development of DLT-based solutions requires ensuring effective coexistence and interoperability between DLT platforms and traditional financial infrastructures.

An industry speaker agreed that interoperability remains the central challenge for scaling DLT, given the current fragmentation across emerging DLT ecosystems, which risks replicating inefficiencies observed in legacy systems. Effective interoperability is a prerequisite for achieving the full potential of digital securities at scale and for preserving liquidity, mobility and security across systems. Addressing this requires coordinated action on data standardisation, product harmonisation and clearer accountability frameworks, as well as on key operational dimensions such as asset and liability representation, ownership recognition, lifecycle management and collateral mobility.

Another industry speaker also concurred that interoperability is a key condition for the adoption of DLT solutions. While regulation can enable experimentation, operational scalability depends on industry-led technical implementation. DLT-to-DLT interoperability requires seamless exchange of data, settlement of transactions and reconciliation of positions across platforms, while DLT-to-legacy interoperability requires connectivity between DLT platforms and existing infrastructures such as CCPs and CSDs, as well as key intermediaries such as custodians, without which, DLT solutions risk remaining disconnected from real trading flows.

An official emphasised that interoperability has also been identified by the European Commission as a key barrier to scaling DLT-based infrastructures in Europe. Without effective interoperability, both across DLT platforms and between DLT and traditional infrastructures, fragmentation will persist and prevent meaningful deployment. Two main factors can support interoperability. First, strengthened public-private cooperation is essential to develop common technical standards and align market practices. Second, the availability of central bank money as a settlement asset is critical. Preserving the two-tier monetary system, with central bank money as the ultimate settlement instrument, is necessary to ensure stability, trust and integration across both traditional and DLT-based infrastructures.

The official added that two Eurosystem initiatives, Pontes and Appia, have the potential to make a significant contribution along these two dimensions. Both initiatives build on extensive experimentation involving a large number of market participants and reflect a pragmatic, iterative approach. The Pontes project aims to connect DLT platforms to the existing TARGET2 wholesale payment infrastructure in the short to medium term, enabling interoperability with established systems. The Appia project, with a longer-term perspective, seeks to enable settlement in central bank money either on a single shared network or across interconnected networks and to define governance and operational models for DLT infrastructures, either directly by the Eurosystem or jointly with other parties.

1.4 Operational, regulatory and economic conditions

A regulator emphasised that the uptake of DLT remains conditional on its ability to outperform legacy infrastructures in terms of cost, speed and safety. The high cost of setting up DLT infrastructures implies that, without a viable business model, broader adoption is unlikely in the near term.

The regulator further highlighted the need to adapt the regulatory framework to the use of DLT and ensure effective coexistence with traditional systems. This raises the question of whether the regulatory framework applicable to traditional financial intermediaries may also need to evolve in this context. Technological neutrality remains essential to support innovation without disadvantaging existing infrastructures, while investor protection and market integrity must also be preserved. Significant operational challenges moreover persist for the time being, beyond the lack of suitable settlement assets, notably with a limited scalability of DLT platforms.

An industry speaker stressed that trust is a critical condition for market adoption. This requires embedding compliance, resilience and risk controls directly into technological architectures to ensure integrity and safety. Existing regulatory frameworks in the US have so far proven effective in supporting responsible innovation in this area.

2. T+1 settlement: implementation progress and remaining challenges

2.1 Implementation progress and market readiness

A regulator considered that the T+1 project is well on track, supported by a structured governance framework involving European authorities and the T+1 industry committee, as well as a clear roadmap, with the process now moving from planning to implementation. Survey results from December 2025 provide useful insights, although response rates to the survey vary across Member States and sectors, limiting visibility on overall readiness and potential bottlenecks. Larger firms are more advanced, with around 80% having already established implementation plans, while 60% of smaller firms intend to start preparations in 2026. Interdependencies across the clearing and settlement chain add complexity, as progress differs across infrastructures: 62% of CSDs have completed their implementation plans, compared with only 33% of CCPs and exchanges. A significant concern relates to investment firms' ability to meet trade-date allocation and confirmation requirements, with 56% of respondents indicating that they do not expect to comply by the end of 2026, despite binding rules expected to apply from 7 December 2026.

An official also observed that market readiness remains uneven. Nearly one quarter of market participant respondents surveyed have not yet familiarised

themselves with the T+1 industry committee roadmap, more than half of respondents in most markets still need to define concrete implementation plans, and around one third of firms remain uncertain about when they will implement the relevant recommendations, indicating significant room for improvement. Against this background, 2026 will be a decisive year for the implementation of T+1 settlement, requiring collaborative action across the post-trade ecosystem to ensure market readiness by October 2027.

The official further noted that the Eurosystem, as operator of T2S, is supporting T2S CSDs and market participants in the transition to T+1, with all necessary T2S change requests already addressed in line with industry committee recommendations. These changes, mainly affecting overnight settlement procedures, are on track to be implemented in time.

An industry speaker highlighted the progress achieved by European and international T+1 initiatives, particularly the development of testing frameworks. Testing is critical, as readiness depends on all participants in the settlement chain being able to operate in a coordinated and fully aligned manner.

The industry speaker also cited results from their own market observations, indicating high levels of same-day trade matching (around 97% in the UK and 96.5% in the EU), suggesting a solid starting point for the transition to T+1. However, readiness remains uneven. While one third of the recommendations have already been implemented, 82% of firms report the need for additional budget, and key challenges persist in terms of automation capabilities, particularly for smaller firms, and dependencies across the post-trade ecosystem. At the same time, cost-efficient technological solutions are now available, including for smaller firms, potentially reducing barriers to adoption and shifting the focus from technology constraints to execution and coordination. Remaining technical issues, such as the standardisation and handling of settlement instructions (SSI), a key element for ensuring timely and accurate settlement, can be addressed through continued market engagement, awareness raising and a solution-driven approach. This will be essential to ensure a consistent transition across the more than 30 markets involved.

2.2 Potential benefits and strategic implications

A regulator emphasised that the transition to T+1 is expected to strengthen market resilience, accelerate access to funds, reduce liquidity and counterparty risks, and act as a catalyst for greater automation.

An official added that a successful transition to T+1 would strengthen the competitiveness of the European post-trade sector. Higher levels of automation and further streamlining of processes and data are expected to reduce risk, improve liquidity availability and support capital flows.

An industry speaker stated that T+1 is a catalyst for transforming operating models. From a custodian perspective, implementation involves raising awareness among clients and supporting the transformation of their operations across the full trade lifecycle, from pre-trade to post-trade to improve efficiency. This includes adapting to new cut-offs, adopting functionalities to improve settlement efficiency such as partial settlement or hold-and-release mechanisms, and aligning with updated T2S timelines, with a view to streamlining processes and increasing automation.

Another industry speaker stressed that T+1 should be seen as an opportunity to redesign post-trade processes and operations, rather than simply accelerate existing ones. T+1 can enable more efficient clearing and settlement processes, including improved netting of trades, which reduces the number of transactions to be settled and helps reduce operational and settlement risk, particularly in more complex segments such as tri-party arrangements and hedge fund activity. Enhanced automation can also support greater consistency across markets and generate efficiencies across the entire trade-to-settlement chain.

2.3 Implementation challenges and coordination requirements

An industry speaker emphasised the need for greater regulatory clarity, in particular regarding the proposed RTS requirement to submit settlement instructions as soon as possible and by 23:59 on trade date, which currently creates legal uncertainty for market participants. An update of the industry implementation handbook will be needed to provide further clarity for market participants.

The industry speaker further underlined that the testing phase represents the next key milestone and must be conducted under robust and well-coordinated conditions. This requires early visibility on the detailed roadmap and technical specifications introduced by financial market infrastructures to ensure that the entire investment chain can prepare consistently, as infrastructures are expected to play a leading role in coordinating the testing programme. Current recommendations are not yet sufficiently followed, creating a risk of misalignment between local markets and further fragmentation within the EU, which calls for stronger coordination efforts. Well-designed testing scenarios and strong market-wide coordination, identified as key success factors in the US, will be critical going forward. All relevant functionalities should be tested as early as possible, including T2S features and settlement optimisation tools, such as partial settlement and hold-and-release mechanisms.

Another industry speaker noted that the US experience demonstrates the importance of automation in improving pre-settlement processes and reducing settlement fails, as well as strong industry collaboration and awareness raising supported by clear regulatory guidance. In Europe, similar guidance is expected from ESMA, the ECB and the European Commission.

An official emphasised that public-private cooperation remains essential for the successful implementation of T+1, as improvements in post-trade efficiency require coordinated action across all stakeholders. A

specific issue concerns the repo market, which plays a key role in managing settlement risk. The shortening of settlement cycles is expected to shift a significant share of repo activity towards T+0, with important implications for the timing of funding and the management of intraday liquidity. To address this, an additional intraday settlement cycle is being introduced in T2S to facilitate earlier settlement. However, this new settlement window must be carefully calibrated to avoid unintended pressure on intraday liquidity, and consistent approaches across CCPs will be critical to prevent imbalances in liquidity management. Although technical, this issue represents a key concern for market participants and illustrates the operational complexity of the transition.

2.4 T+0: emerging implications

An industry speaker noted that interoperability will be critical in the context of a potential move to T+0, which is currently being explored in certain markets. Such a transition raises complex operational and strategic questions. T+0 could take different forms, including near-real time (atomic) settlement, intraday or end-of-day batch settlement, each with significant implications for cash funding, particularly where pre-funding is required, foreign exchange processes, CCP netting and overall settlement efficiency. The potential impact of extended trading hours with a possible move to 24 hour / 5 day trading must also be considered, alongside differing expectations of retail and institutional investors. The desirability and business case for a move to T+0 therefore remain uncertain for the European market, although the topic is expected to attract increasing attention.

A regulator observed that T+1 is a necessary foundation before any potential transition towards T+0.

Wrap up

The Chair noted that the potential benefits of DLT are clear notably in supporting the SIU. However, despite extensive experimentation across Europe, the development of DLT has so far fallen short of initial expectations. Significant cost, operational and regulatory issues remain to be addressed in order to move from experimentation to broader deployment. The proposed review of the DLT pilot regime in the MISP is expected to support the scaling of DLT-based solutions. Interoperability is a key condition for scaling DLT, in particular with the need to ensure effective coexistence between DLT-based solutions and traditional infrastructures. The Eurosystem Pontes and Appia initiatives together with strengthened public-private cooperation are key enablers of more efficient and integrated post-trade processes.

The transition to T+1 is also progressing from planning to implementation, but significant operational challenges remain ahead of the October 2027 deadline, including testing, process adaptation and coordination across the settlement chain. Survey results indicate uneven levels of readiness across market participants, highlighting the need for broader and more timely engagement across the ecosystem. Successful implementation will require strong coordination between public authorities and market participants, alignment across jurisdictions transitioning within the same timeframe, and the incorporation of international experience, particularly from the United States.

Looking ahead, the potential move to T+0, together with the development of extended trading hours, are emerging topics requiring further analysis.