

## **Cover note for the attached draft report “*The potential impact of DLTs on post trade and on the wider EU financial market integration*”**

*This cover note explains the background of the HSG analysis on DLTs and the structure of the ensuing draft report. It proposes follow-up actions that have been identified by the HSG as potentially of interest to the AMI-SeCo community of stakeholders and to its governance.*

### **1. Background**

In July 2016, in order to assess the relevance and possible impact of distributed ledger technologies (DLTs) on the T2S community of stakeholders, the T2S Advisory Group (AG) agreed on a revised Harmonisation Steering Group (HSG) mandate that covers the potential impact of technological innovation on harmonisation and financial integration. Based on this revised mandate, the HSG established a task force to analyse the potential impact of technological innovation such as DLTs in the securities post trade environment and how that may affect harmonisation activities sought by the community of stakeholders of T2S, as well as further harmonisation needs in view of the wider EU financial integration agenda.

The HSG agreed in its meeting of 8-9 June 2017 to recommend the attached report for publication by the AMI-SeCo. The report is educational in nature and covers a wide range of aspects related to the possible applications of DLTs in post trading services – from issuance-related processes to aspects relating to interoperability or reporting – with a focus in the settlement area.

### **2. Structure and main findings of the draft report**

To simplify the approach to such a broad and often technical subject, the draft report is structured as follows: an introductory chapter describes basic concepts of DLTs that are useful for the ensuing analysis; Part I focuses on the possible impact of DLTs on some foundations of current financial markets such as account structures, the issuance of securities, different forms of cash and their use in Delivery versus Payment (DvP) transactions; Part II is structured around the main issues related to settlement, namely settlement finality, the Settlement Discipline Regime (SDR), settlement day schedule and calendar, settlement cycles, and connected services such as collateral management, asset servicing and reporting; Part III provides further insights on the relations between DLT adoption and some aspects related to Financial Market Infrastructures (FMIs) that do not concern the settlement process directly but are

nevertheless relevant to allow safe interaction with other market participants, such as digital identity, data privacy issues, cyber resilience, reporting and interoperability; the conclusive chapter draws together results with regards to the impact of DLTs on the securities post trade industry, and especially on T2S harmonisation as well as on broader EU financial integration. Similarly to the executive summary, the conclusive chapter can be read on a stand-alone basis and provides an overview on the report without delving into the in-depth analysis carried out in the other chapters.

A general result of the HSG analysis on DLTs is that market participants have an interest in joining forces to ensure that new technological solutions are developed cognisant of business needs, and that the fruitful collaboration that led to the successful launch of T2S is leveraged to foster integration as an enabler of safer and more efficient markets. The AMI-SeCo and its substructure could play a role in this respect by perpetuating the ongoing analysis on the impact of technological innovation on the financial sector.

It is important to note that a number of elements of a theoretically DLT-enabled financial market have to be properly designed and put together before DLT adoption can be considered a realistic possibility in post-trading and especially in the securities settlement space. Consensus algorithms are a case in point in this regard, since it is difficult to define clear moments of finality when validation of record updates is distributed across network participants.

### **3. Potential follow-up actions for the AMI-SeCo governance**

The analysis carried out to produce the educational report on the potential impact of DLTs on post trade activities has highlighted a number of policy aspects that may be of interest to the AMI-SeCo community of stakeholders and that the HSG task force plans to address until December:

1. Some use cases based on DLT networks for the sharing of information (not settlement) have been identified as potentially of interest to the AMI-SeCo community of stakeholders and may deserve additional analysis with a view to assessing their feasibility and practical interest. Such use cases are not related to the settlement of securities transactions but rather to information flows and reconciliation among market participants for possible use in the realms of corporate actions processing, registration and identification of securities holders, and taxation processing:
  - The use of DLT networks for the streamlining and standardization of all communications about corporate events originating by issuers may be a powerful tool to ensure that a single, “golden copy” of all corporate events is easily produced by the originators of such information and readily accessible to all interested parties and users from different markets. The same channel could also be used to facilitate the bottom up flow of information to relevant entities in the case of e.g. elective corporate actions.

- The possibility of using a decentralised technical model for exchanging shareholder information on a cross-border basis was considered by the T2S AG already in 2011. In order to record information at the level of end investors, a pan-European DLT solution could be imagined to interact either with existing local registration systems or with connected distributed ledgers that would be updated in local markets. In the former case, each registration system would have to deal with the complexity of interfacing to a DLT network but could keep its national or functional specificities with no need to introduce additional data in settlement instructions. The latter case would instead require standardisation of the DLT protocols used in each market by omnibus account holders.
  - A preliminary analysis on tax processing has highlighted that complex procedures, such as capital gains tax or *pro-rata temporis* calculations, could benefit from DLT implementation if considered in the system design. Both native and tokenised DLT assets could be tracked per individual unit or even fraction over time if they have been on the DLT for the entire period of history relevant to the tax calculation. This may drive DLT implementations at end beneficial ownership level, or drive the development of “tiered wallets” capable of tracking transactions for tax reporting purposes without passing information via settlement messages and instead referring to the information relative to the identification of the beneficiary owner.
2. All aforementioned use cases require an appropriate level of standardisation. Timing of standardisation is a key strategic issue and the process shall be general and descriptive until a technology reaches maturity. On the one hand, if standards are set too early and without involving all interested parties then they may soon become obsolete as the technological capabilities are still not fully understood. On the other hand, lack of standards could create barriers to integration that may be difficult to overcome thereafter. The AMI-SeCo could provide its input to ongoing and future discussions on DLT-related standards.
  3. Proper governance of any market infrastructure is important to ensure its safety and efficiency. It is possibly more important in the case of a DLT network, where different legal entities share the responsibility over some processes and data. The potential adoption of DLTs and cross-institutional IT platforms in general would require the development of an appropriate governance to ensure that responsibilities over data handling are clear and that a cyber resilience framework can be adopted in a way that ensures full commitment by all network participants to the common good of data integrity and protection from external threats. Ultimately it would be desirable to achieve an industry-wide international agreement on the approach to DLT network governance, as this will facilitate long-term interoperability and integration amongst securities markets globally. The AMI-SeCo could contribute to reflections on such framework by ensuring that the implications of different DLT models are properly understood, both by prospective users of the technology and by the regulators that represent

a public interest in the protection of safety and efficiency of financial markets. It may be necessary to harmonise some design and operational aspects of the DLT implementation, also considering how a combination of DLT systems and a non-DLT systems, such as T2S, could be able to operate.

4. The topic of central bank money is an exclusive competence of central banks. However, T2S stakeholders may provide valuable insights via the AMI-SeCo by assessing what DvP solutions would be preferable in the current environment - both in the realm of CoBM and in a potential effort to connect any DLT securities settlement system with the T2S platform to achieve DvP in CeBM.
5. The working group on harmonisation of settlement cycles advised the European Commission in 2009 that settlement cycles shorter than T+2 should not be considered, inter alia, because that “requires seamless communications between parties involved in the settlement process” both in the internal market and for FX transactions. The possibility that technologies enabling such seamless communication may be introduced in financial markets opens an opportunity to perform an analysis on the pros and cons of different settlement cycles such as T+1 or T+0.

#### **4. Proposal**

**The HSG invites the AMI-SeCo:**

- 1) approve the attached draft report for publication as a contribution to industry discussions and**
- 2) approve and provide guidance on the five potential follow-up actions identified in this cover note.**