



EUROPEAN CENTRAL BANK

EUROSYSTEM

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AMI-SeCo analysis on potential impact of DLT on post-trade harmonisation and integration

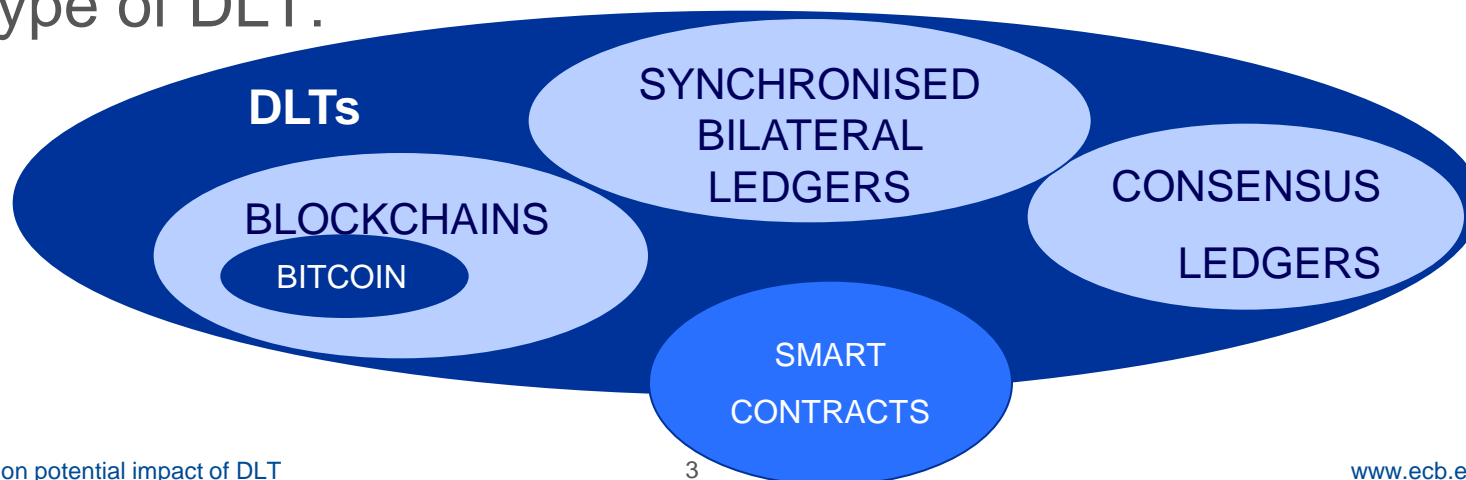
ABI Post-Trading & T2S Forum

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- 1. DLT landscape in the AMI-SeCo analysis**
- 2. Focus of the report**
- 3. Main findings on T2S and EU integration**
- 4. Conclusions and follow-up work**

- A distributed ledger is a shared record of either transactions or account balances for a given set of assets and users
- Users can adopt different types of DLT to modify accounts in a consistent ledger without central management system and yet each user shall be able to consider them as authoritative
- The unrestricted and public Bitcoin blockchain network is only one implementation of blockchain technology, which is one type of DLT:



AMI-SeCo report is **educational** on a range of aspects relating to potential DLT application in post-trade services:

- 1) on **foundations** of current financial markets
 - account structures, issuance of securities, different forms of money and their use in DvP transactions

- 2) on **settlement** processes
 - settlement finality, SDR, settlement day schedule and calendar, settlement cycles, and connected services, i.e collateral management, asset servicing

- 3) on **other areas** of relevance for post-trading
 - digital identity, data privacy, cyber, reporting, interoperability

⇒ Assessment of **potential impact** on T2S and on the broader EU integration

Analysis uses different implementation **scenarios** to assess:

- 1) potential impact of DLT adoption on current processes
- 2) what new processes could be introduced

- ⇒ DLT cannot bring substantial benefits without **interoperability** across distributed ledgers as well as between DLT and non-DLT systems
- ⇒ Many elements of a DLT-enabled financial market have to be designed and put together **before** DLT adoption can be considered a realistic possibility
- ⇒ T2S community of stakeholders has an interest in maintaining currently agreed **standards** or even considering introduction of new ones, if required

n.1 – T2S ISO 20022 messages

DLT systems connected to T2S may require additional mess. standard

n.2 – T2S matching fields

Duplication of standard instructions if assets are held both on and off DL

n.5 – Settlement day and a single calendar

Propensity towards 24/7. (DLT nodes would need a standard)

n.6 and 18 – (T2S and market corporate action standards)

Potentially unaffected. (Beyond T2S, automation requires granularity)

n.7, 8 and 9 – Settlement finality

Highly dependent on DLT model. Concern for interoperability

n.11 Settlement discipline regime

DLT and non-DLT systems may face different constraints

n.12 – Settlement cycles

T2S is agnostic to shorter cycles. Is there a hype on shorter cycles?

n.15 and n.16 – Securities and Cash account numbers

Use of public keys is not compatible with T2S standards

n.20 – Withholding tax procedures

Potentially unaffected. May help development of solution for processing

n.21 – Shareholder transparency and registration procedures

Shared data may help development of decentralised solution

n.24 – Portfolio transfers

Simplified if “account” is at the level of end investor’s wallet

1. **Harmonisation** will be a necessary condition for the adoption of any new technology in post-trade services
2. Distribution of responsibility for settlement of tradeable securities is not compatible with current **regulatory framework**
3. DLT may be useful in **niche** markets, or for information sharing purposes when **consistency** of different data sources is needed

The AMI-SeCo requested its substructures to assess **feasibility and practical interest** in potential DLT solutions to share info related to:

1. Shareholders' **information for registration**
2. **Corporate events** originated by issuers (top-down) and decisions taken by investors (bottom-up)
3. Tracking of asset holdings for **tax reporting**

Assessment is ongoing and the involvement of all relevant stakeholders is indispensable