



Post-trade made easy

Continuity and Robustness of a Central Securities Depository

Edwin De Pauw – July 2017



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A brief introduction to CSDs

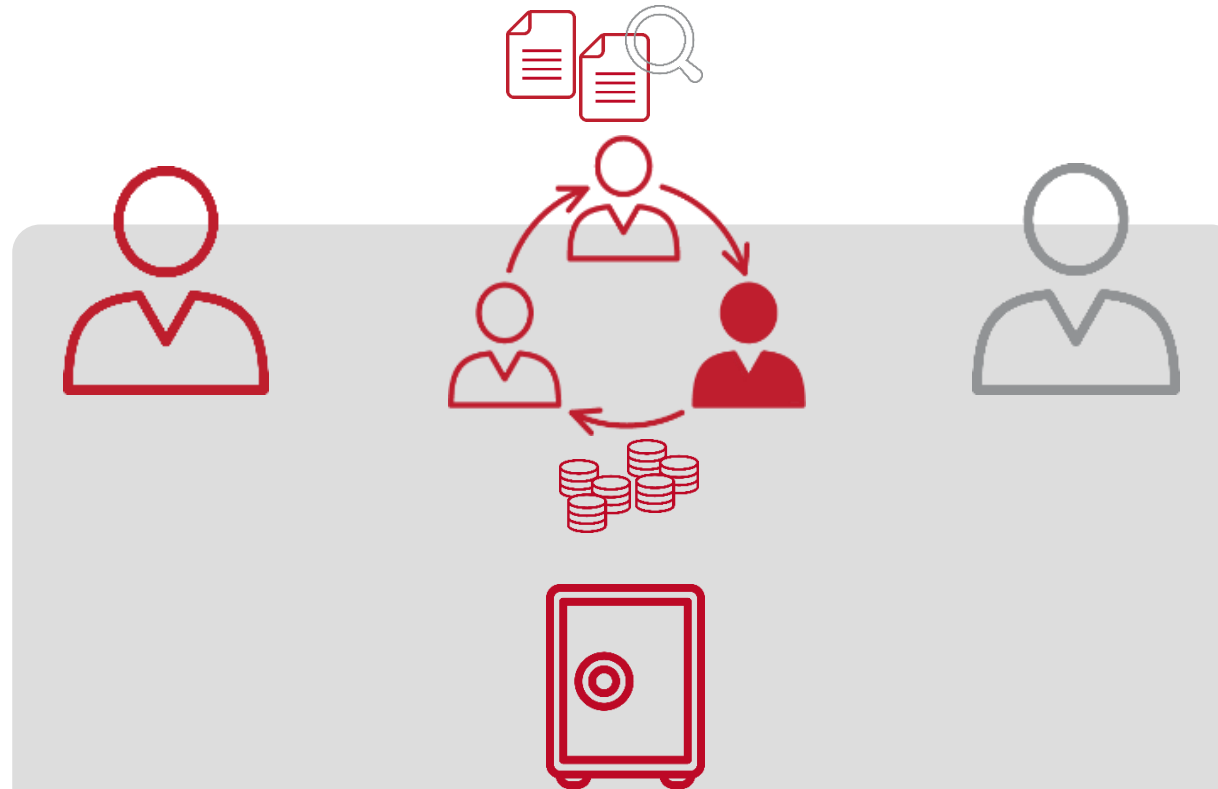


A problem that needed to be solved: Physical transfer of securities





The solution: immobilisation of securities in a CSD



- Benefits from a Central Securities Depository
 - ▶ Elimination of risks associated with physical certificate such as bad delivery, fake securities, etc.
 - ▶ Immediate transfer of securities on a DVP book-entry basis
 - ▶ Reduction in transaction cost
 - ▶ ...



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European CSD landscape today

41 (I)CSDs across Europe

32 CSDs in the EEA

30 CSDs in the EU

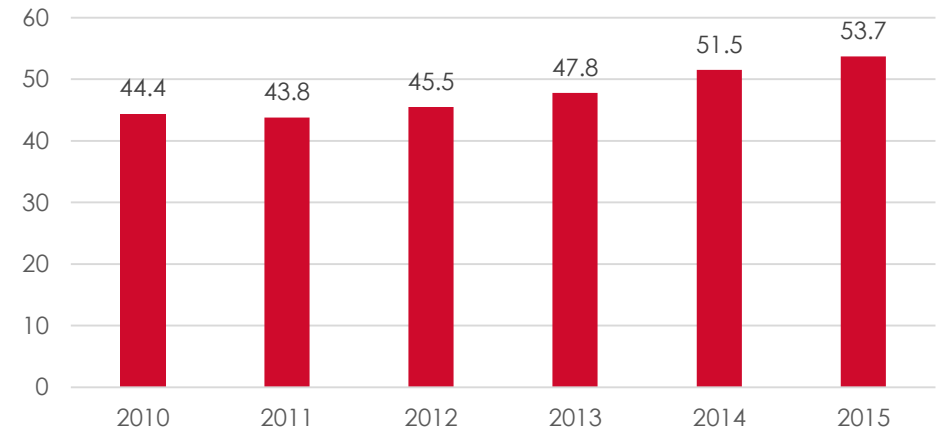
21 CSDs in the Euro Area

2 ICSDs

4 CSDs in EU
candidate countries

5 other
European CSDs

Total value of secs held in ECSDA
member CSDs (Eur Trn)



Source: ECSDA 2015 CSD Factbook



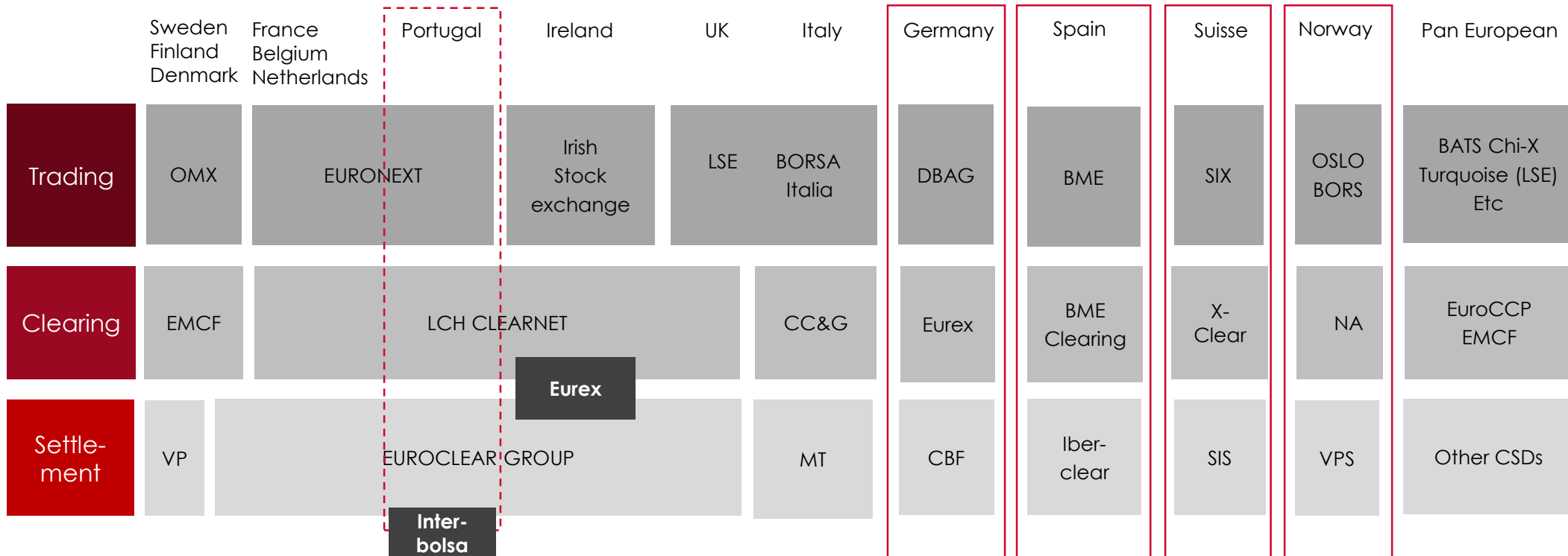
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Further strengthening the
European financial markets...



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European trading and post-trading today

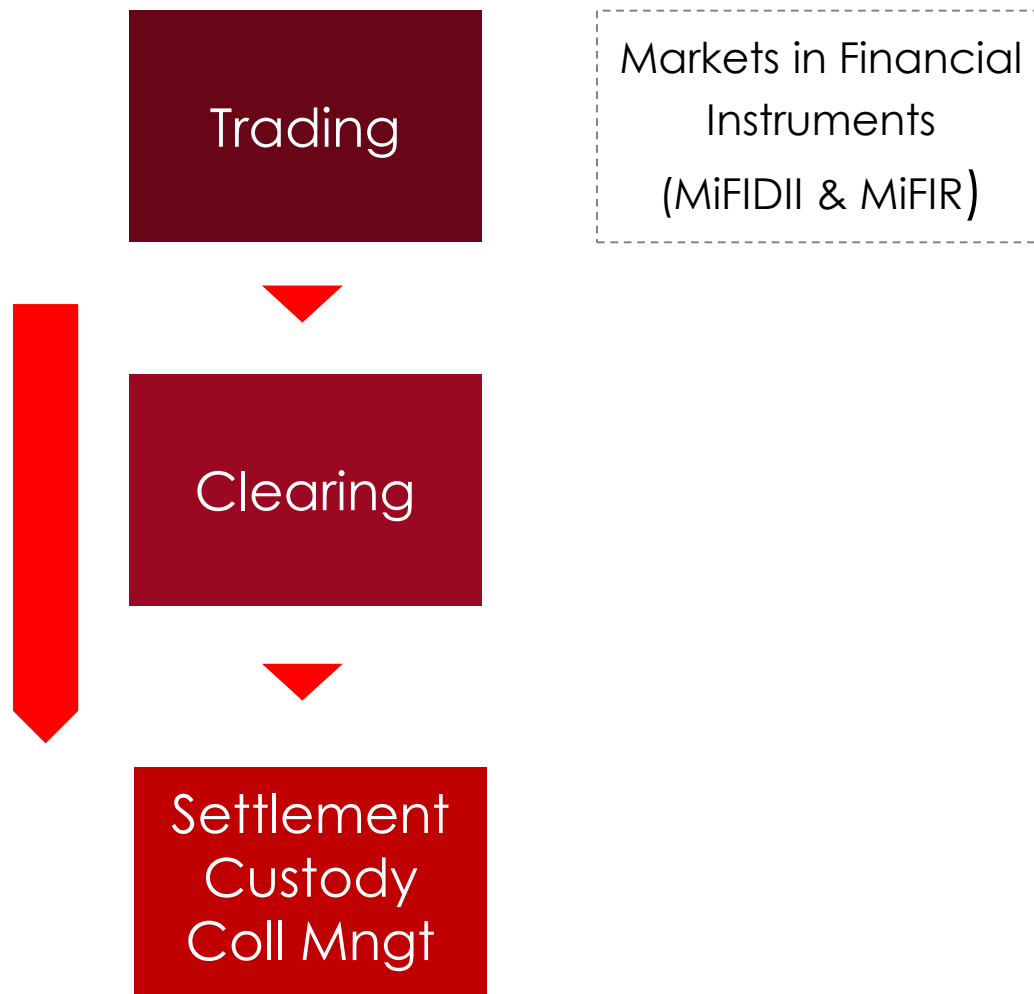




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...through legislation

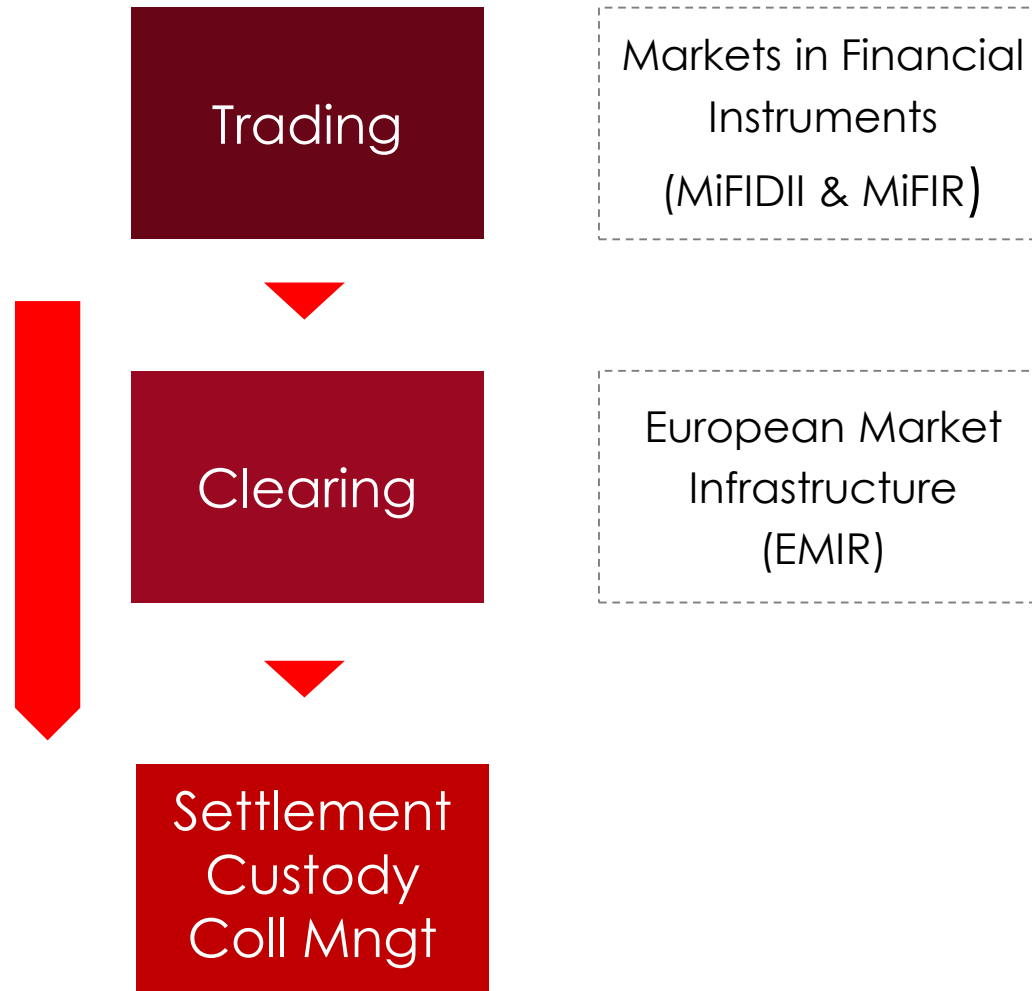
EU legislation trading and post-trading





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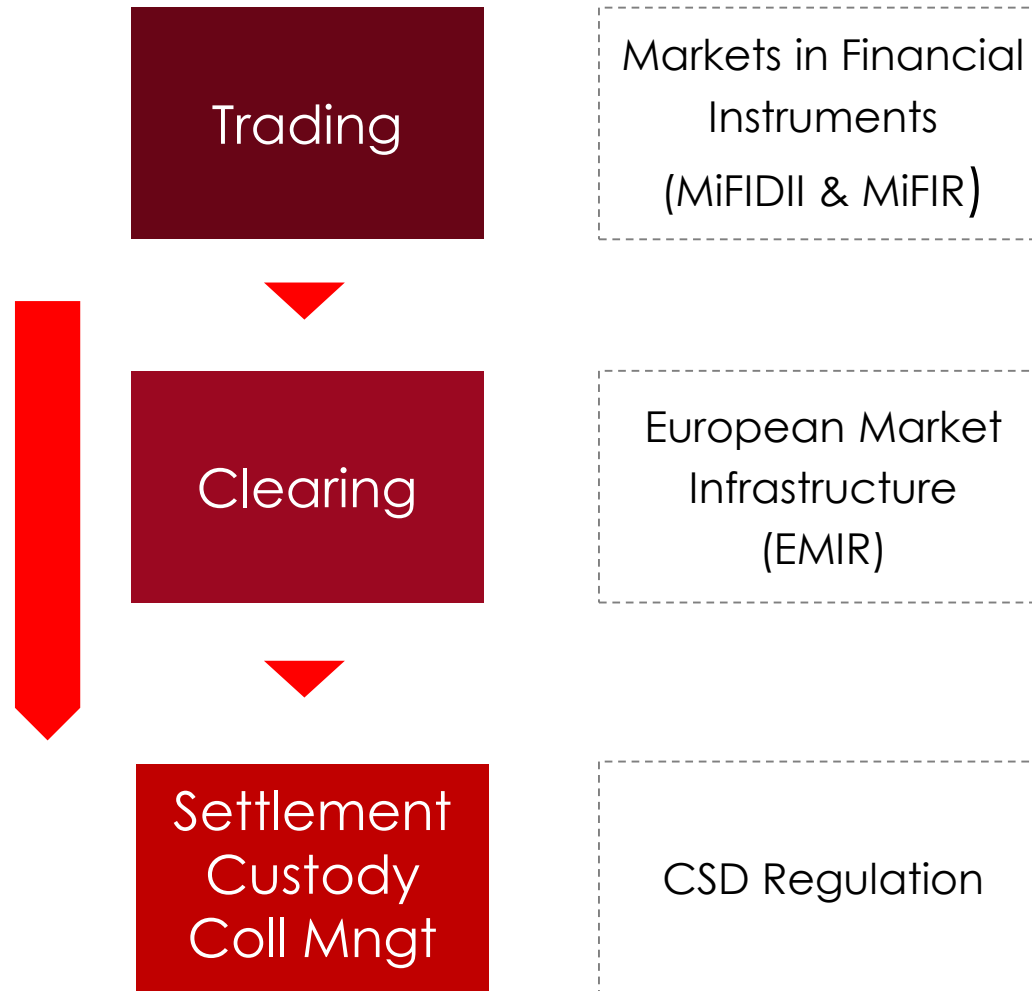
EU legislation trading and post-trading





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EU legislation trading and post-trading





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The CSD regulatory framework



Single market
for Europe =
CSD consolidation ?
or fragmentation?

Two main catalysts: EU CSD Regulation and T2S



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Summary of the main elements of CSDR

1

Changes to EU Securities Market Structure

- Mandatory dematerialisation and Immobilisation
- Mandatory Settlement Discipline and Buy-Ins Regime
- T+2 settlement (done)
- Freedom of issuers to choose their CSD of issuance
- Transparency rules for non-CSD 'Settlement Internalisers'

2

Common and consistent regulation of CSDs

- New definition of a CSD
- Definition of Core and Ancillary services
- New Passport to provide services in another Member State
- Increased capital requirements for CSDs
- Operational, Risk, Prudential and Conduct of Business rules inspired by CPMI-IOSCO Principles

3

Specific rules for CSDs that settle in commercial bank money

- CSDs can settle in commercial bank money ... but
- Banking licence must be a "limited purpose bank" and ...
- ... stringent new rules on credit and liquidity management, over and above standard banking legislation



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...through harmonisation
and consolidation



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ECB - T2S





Capital Markets Union

Capital Markets Union (CMU) is the current priority of the Commission for Financial Stability, Financial Services and Capital Markets Union (DG FISMA)

Three complementary objectives for CMU:

- Developing more efficient and liquid markets for issuance of financial instruments
- Harnessing long-term savings to promote investment
- Promoting open, integrated capital markets infrastructure



European Post-Trade Forum (EPTF)

- The Commission established an EU-wide expert group on post trading, including collateral, called the EPTF.
- EPTF is analysing post-trading legislative developments, organisational and operational developments and whether there are 'new', or unresolved 'old', Giovannini barriers.
- EPTF consultation report suggests that further reform (as a matter of priority) is needed in the areas of:
 - inefficient withholding tax procedures
 - legal inconsistencies and uncertainty (including investors' ownership rights in a dematerialised custody chain, and conflicts of law)
 - fragmented Corp Actions Processing and implementing market standards
 - inconsistent application of asset segregation rules
 - lack of harmonisation in registration rules
 - complexity of Post-Trade reporting.



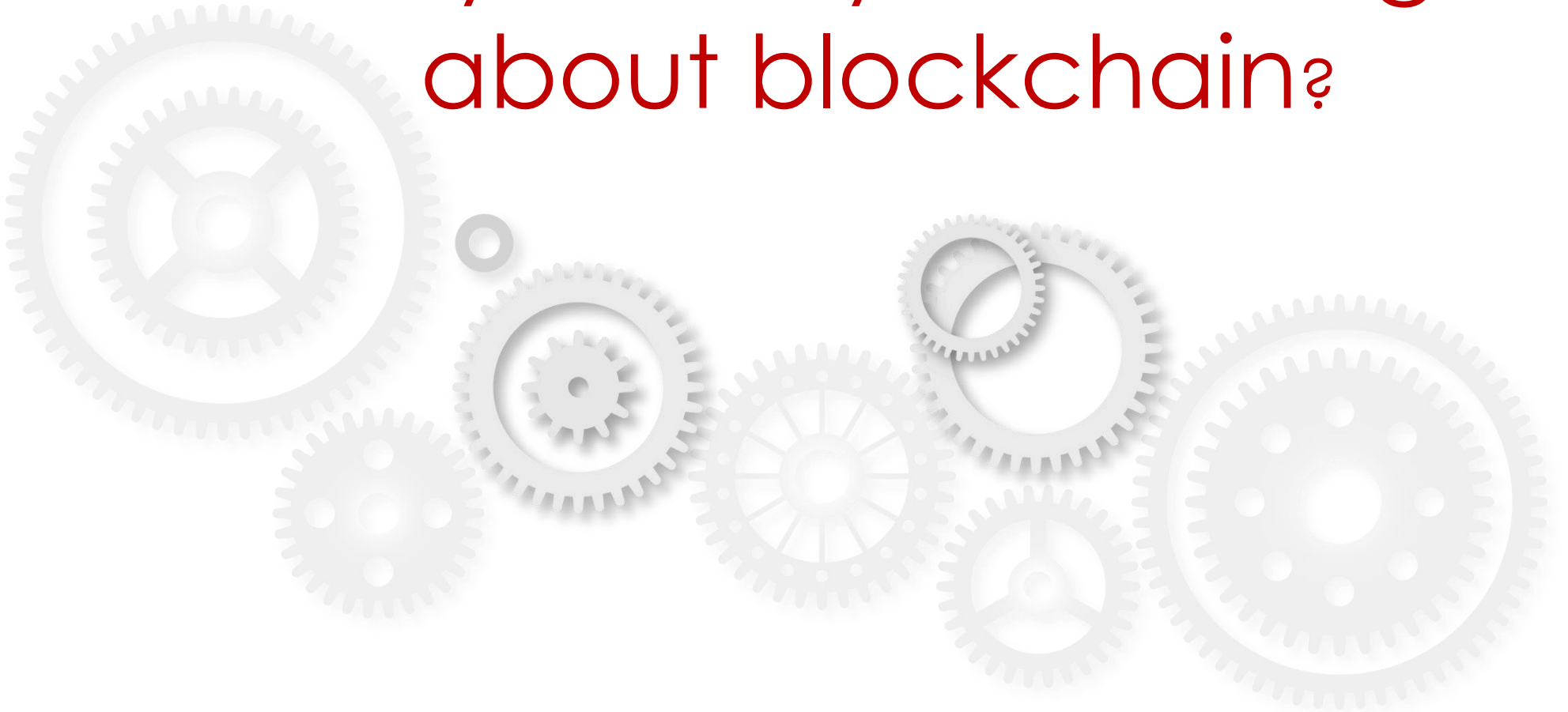
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Looking into the future



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Why is everyone talking about blockchain?





Euroclear Bankchain

Using blockchain to deliver a new settlement service for the London bullion market

What?

Euroclear Bankchain is a next generation settlement platform combining the speed and simplicity of unallocated gold trading with the security of the allocated bullion.



Why?

- ▶ **Improved liquidity** across the market through the mobilisation of bullion and greater transparency through integrated reporting mechanisms.
- ▶ **Operational efficiency** via simultaneous DvP, enhanced automation and straight through processing.
- ▶ **Regulatory compliance** through instant settlement. Reduces counterparty risk and increases balance sheet efficiencies.

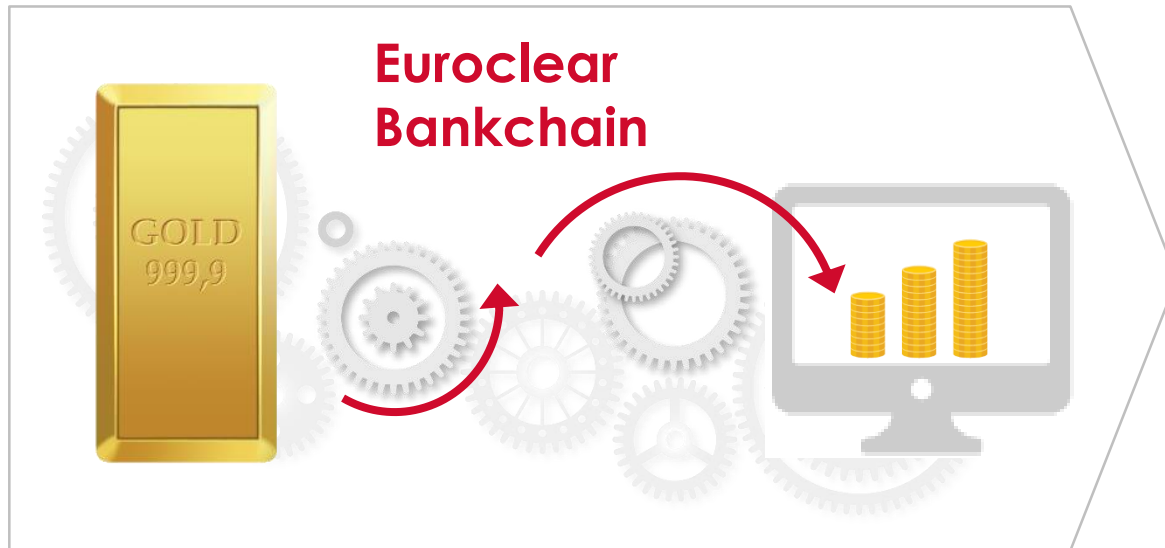
How?

The Euroclear Bankchain service is a **direct settlement network** whose underlying technology is based on a shared, cryptographically secure ledger of transactions maintained by a network of participants.

Euroclear Bankchain has been engineered to integrate with existing infrastructure, enabling a seamless transition for participants.

Financial Market Infrastructure for physical gold

Powered by blockchain



Benefits include

- Improved liquidity
- More flexible trading
- Increased operational efficiency
- DVP settlement
- Pledge gold as collateral
- Reduced risk & capital costs
- Transparent auditability
- Opens the market to new participants



Blockchain in the capital markets

The prize and the journey

The prize...

- Utopian vision of capital markets operating DLT, removing the need for large parts of the industry value chain
- Could drastically reduce operational inefficiencies as well as credit and liquidity costs
- Investments being made and talent moving into distributed ledger start-ups and utilities
- Unparalleled dedication of resources and effort within institutions for such a nascent technology application

... the journey?

- A truly new way to organise financial transactions
- No certainty yet that it will generate real benefits
 - ▶ Industry thinking embryonic, with little quantification of benefits or fully-developed use cases
 - ▶ Potential for non-DLT to achieve some of the benefits
- Different paths to adoption
 - ▶ Competitive innovations vs industry adoption



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What capabilities are required?

Blockchain implementation capabilities required

Blockchain technical expertise 1

- Security and crypto expertise
- Distributed systems expertise (cloud native application development)
- Messaging technology and message pattern design expertise

Technical domain expertise 2

Deep technical expertise in financial service products, pricing and technology

Industry relationships 3

- Forming user groups (Blockchain a network technology)
- Coordination of standards and protocols

Financial system experience 4

Coding and integration in high volume applications

Technology journey 7

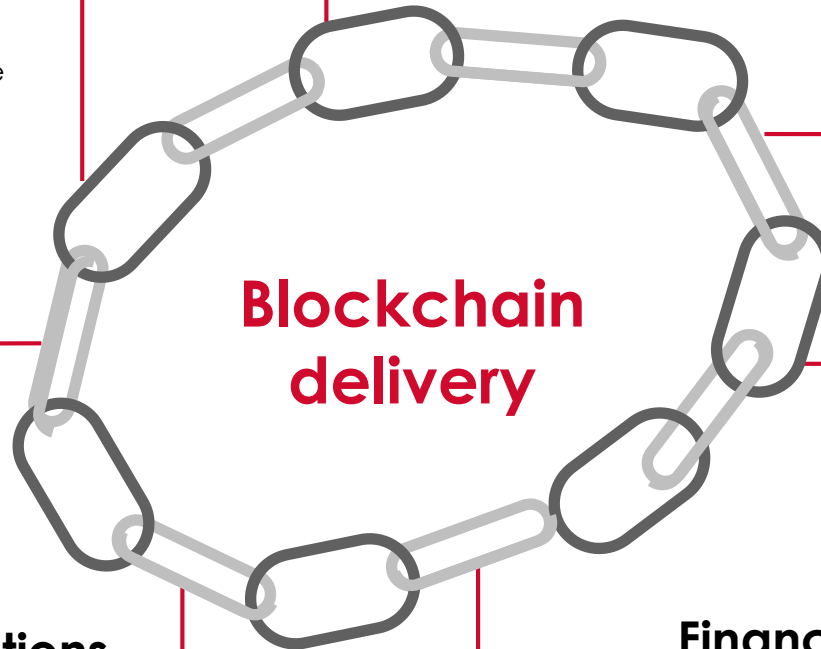
- Technology change / programme management
- Continuous integration / agile

Regulatory skills 6

- Knowledge of constraints
- Navigating existing and coming regulatory change

Legacy integrations 5

Integrating new solutions into existing platforms and processes



**Blockchain
delivery**



Key regulatory considerations



- Technology should not be regulated; but rather the users of the technology
- DLT-enabled services should meet existing laws and regulations
- Longer term, regulatory aspects need to evolve as DLT transforms markets
- Regulatory guidance should be global, or at least EU-wide



A role for Financial Market Infrastructures (FMIs)

- CSDs do not require specific regulatory permission when using DLT
- Main CPMI-IOSCO and CSDR requirements apply:
 - ▶ Settlement finality
 - ▶ Delivery Versus Payment
 - ▶ Central bank settlement
 - ▶ Operational risk





Need for central authorities



- New 'central authority' functions
 - ▶ Identity management ('permission')
 - ▶ Key management
 - ▶ Smart contract management
 - ▶ Dealing with insolvency of investor, portability of positions
 - ▶ Dealing with interoperability
- New infrastructure roles could occur
 - ▶ Application of CPMI-IOSCO principles



The way forward: collaboration

- Blockchain can bring benefits to post-trade
- The current landscape is not optimised for widespread adoption of DLT
- The timing is right for regulators, FMI, banks and fintech providers to come together to realise new ways of working



Further information

Download our whitepapers and find out more about our blockchain initiatives at **[euroclear.com](https://www.euroclear.com)**.



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