



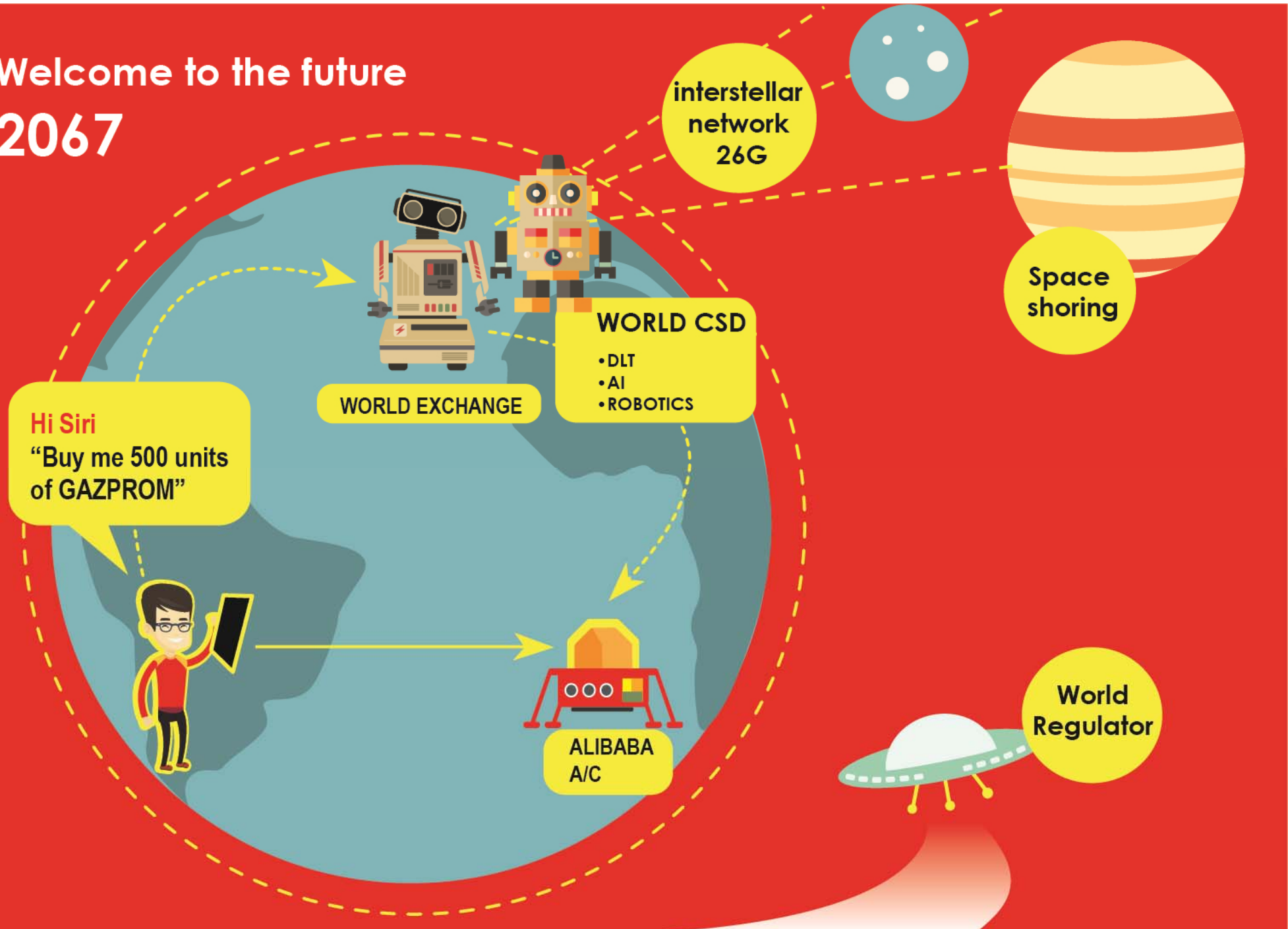
*Post-trade made easy*

Are CSDs in a survival mode ?

Past, current and future shapes

Bernard Ferran – September 2017

# Welcome to the future 2067





*Post-trade made easy*

# Evolution of the CSDs over the years

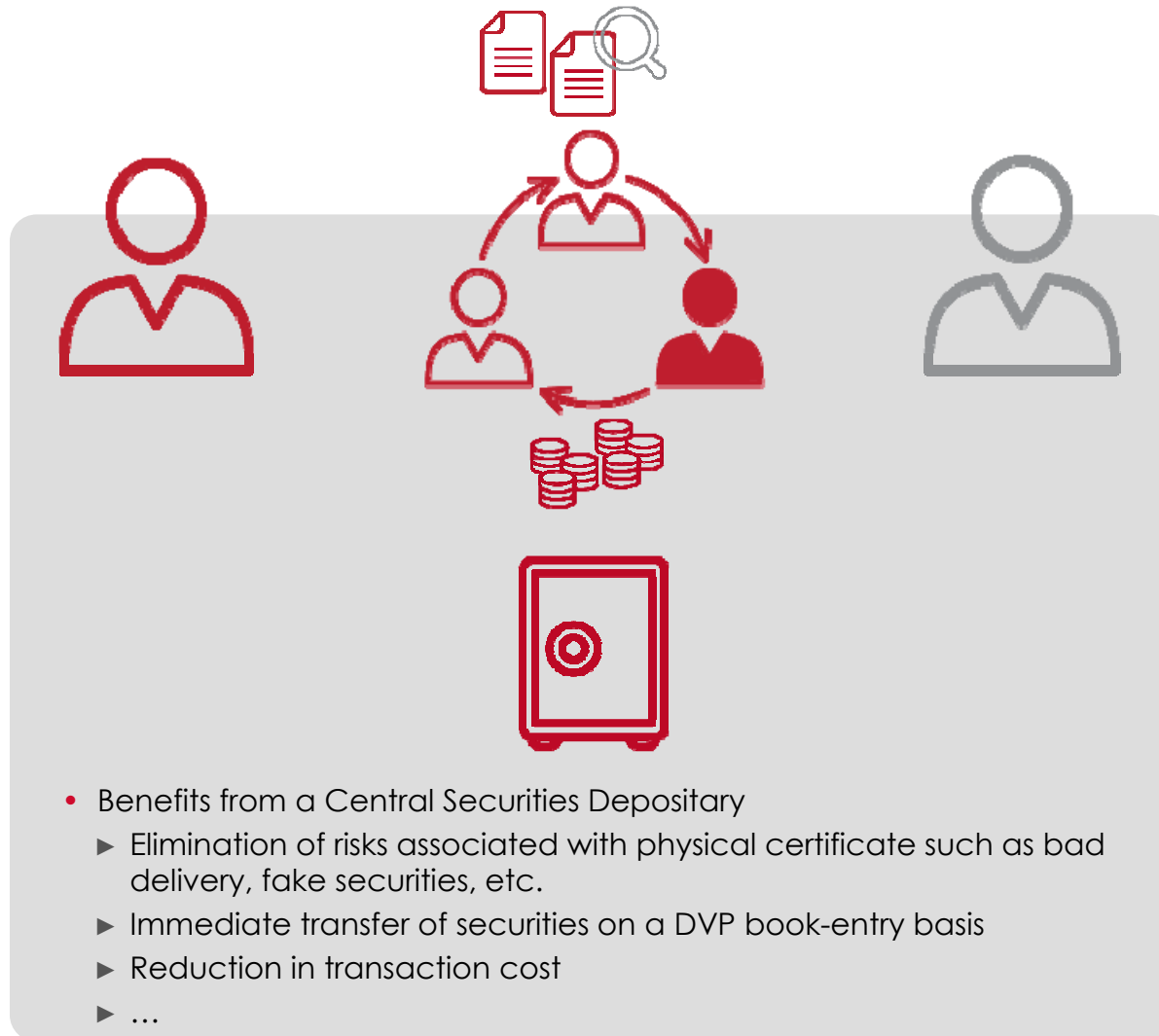


# A problem that needed to be solved: Physical transfer of securities



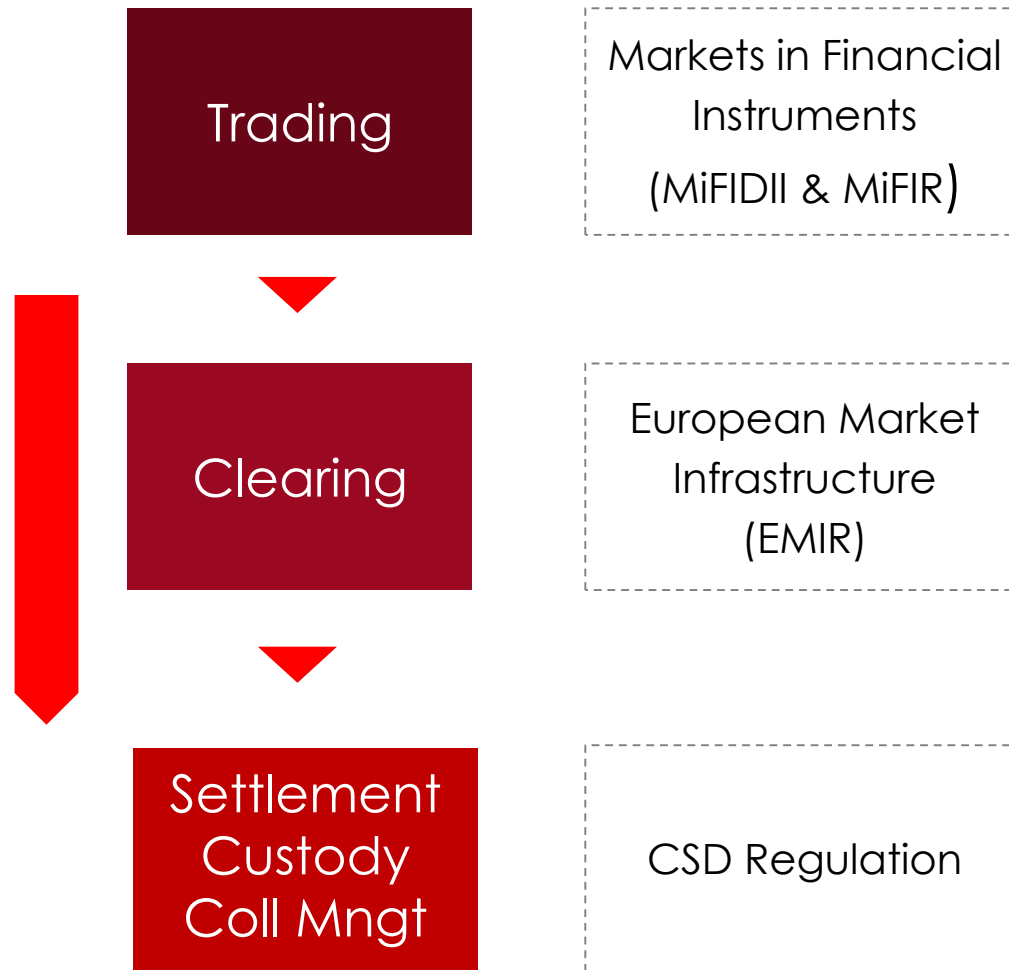


# The solution: immobilisation of securities in a CSD





# European Union legislations on trading and post-trading





# The CSD regulatory framework

- Financial stability  
**Safety**
- Cross-border efficiency  
**Harmonisation**
- EU Single Market  
**Competition**  
**Consolidation**



Single market  
for Europe =  
CSD consolidation ?  
or fragmentation?

Two main catalysts: EU CSD Regulation and T2S



# 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

# Looking into the future...

1. blockchain (DLT) & new technologies
2. Mutualisation opportunities
3. Opportunities for the C.I.S.?



“The Blockchain Will Do to the Financial System  
What the Internet Did to Media”

Harvard Business Review

“You can’t stop things like Bitcoin. It will be  
everywhere and the world will have to readjust.  
World governments will have to readjust”

John McAfee, Founder of McAfee.



# New technologies

*“It is now becoming obvious that the accelerating pace of technological change is the most creative force—and also, the most destructive one—in the financial services ecosystem today “* P.W.C.

- DLT
- Artificial Intelligence (A.I.)
- Robotics
- Big Data
- Internet v2.0



# Blockchain in the capital markets

The prize and the journey

## The prize...

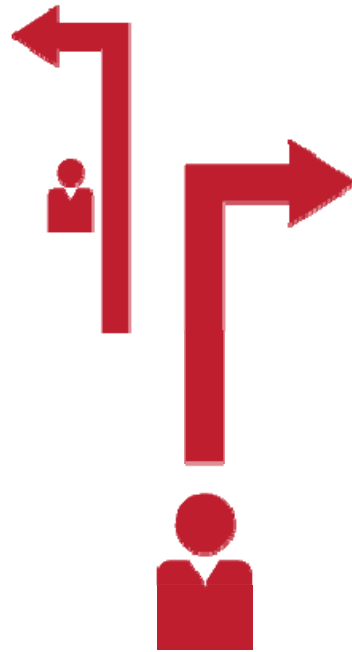
- Utopian vision of capital markets operating DLT, removing the need for large parts of the industry value chain
- Could drastically reduce operational inefficiencies as well as credit and liquidity costs
- Investments being made and talent moving into distributed ledger start-ups and utilities
- Unparalleled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



# 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,
- CSDs do not require specific regulatory permission when using DLT



# 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



## DLT – recent initiatives

- DLT on Private Equities
  - ▶ From 4 months to 1 day
  - ▶ Savings on Legal fees
- NSD & Wave Platform
  - ▶ Build own crypto currency wallet
  - ▶ Settlement services for digital assets and cryptocurrencies
  - ▶ Other NSD initiative : e-voting, proxy voting
- Russian Ministry of Health
  - ▶ DLT to exchange patient data
- National Bank of Kazakhstan
  - ▶ plans to sell its short-term notes to retail investors using a mobile application based on blockchain technology,





## DLT – recent initiatives

- Central Bank of Belarus
  - ▶ Blockchain Banking Network. The Belarusian Stock Exchange is also planning to use blockchain for securities in the stock and OTC markets.
- Ukrainian Government
  - ▶ allow foreign investors to purchase real estate more easily and securely, and enable Ukrainian properties to be sold entirely online.
- Georgia
  - ▶ Use Blockchain Technology for Developing Land Registry
- National Bank of Kazakhstan
  - ▶ plans to sell its short-term notes to retail investors using a mobile application based on blockchain technology,



## DLT – recent initiatives

- Bank of Russia
  - ▶ Started pilot of an ethereum-based blockchain to process on-line payments and verify customer data
- Russian lenders
  - ▶ Sberbank & VTB developing “Masterchain” for mortgage certificates
  - ▶ database of blacklisted clients distributed across banks
- Alfa-Bank
  - ▶ Together with S7 Airlines: issuing airline tickets using DLT



## The way forward: collaboration

- Blockchain can bring benefits to post-trade & CSDs
- The current landscape is not optimised for widespread adoption of DLT
- The timing is right for regulators, FMIs, 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).



## Mutualisation in the post-trade industry

“Smaller and medium size players must find a way to level the playing field, and mutualizing costs is one method” *P.W.C.*

Mutualization is to partner with an operator to develop a shared services program focused on a specific post-trade activity, with the bank/CSDs designing the offering and the operator investing in developing infrastructure for shared services.

Subsequently, as other banks/CSDs sign up, the engagement would turn into an industry-wide shared services setup

The costs will get mutualized and the founding partners will get the chance to generate new revenue stream, derived from each new client participating in the service.



## What can be mutualized ?

- Back offices functions and processes
- reconciliations & trade processing
- regulatory reporting
- collateral management
- IT developments
- issuances
- Trade repositories
- Registry functions
- KYC & AML
- etc.



# Mutualisation initiative : Taskize - a Problem Management Network for Financial Services



- Provide a standard way of engaging with the industry
- Offer a uniform way of navigating your counterparts
- Share a consolidated view of operational issues across all your providers
- Give real-time accurate insights into the actual activity in operations
- Satisfy need for security, control & auditability
- Offer innovation in operations with a light touch

**To radically reduce time to resolution to improve client satisfaction, reduce costs and reduce risks**



## Taskize - Live with Euroclear Bank since December 2016



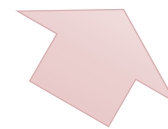
- Time wasted waiting on-hold
- One call-at-a-time
- Poor workflow
- Limited visibility



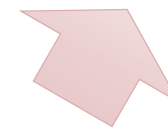
- Emails multiply
- Increased waste and risk
- Poor workflow
- No visibility
- Potential to lose information



- Raise problems directly with Euroclear client services
- Track progress to resolution
- Share problems easily
- Eliminate 'dead time'
- Miss nothing in post-trade
- Puts the client in control



Satisfaction



Efficiency



Risk

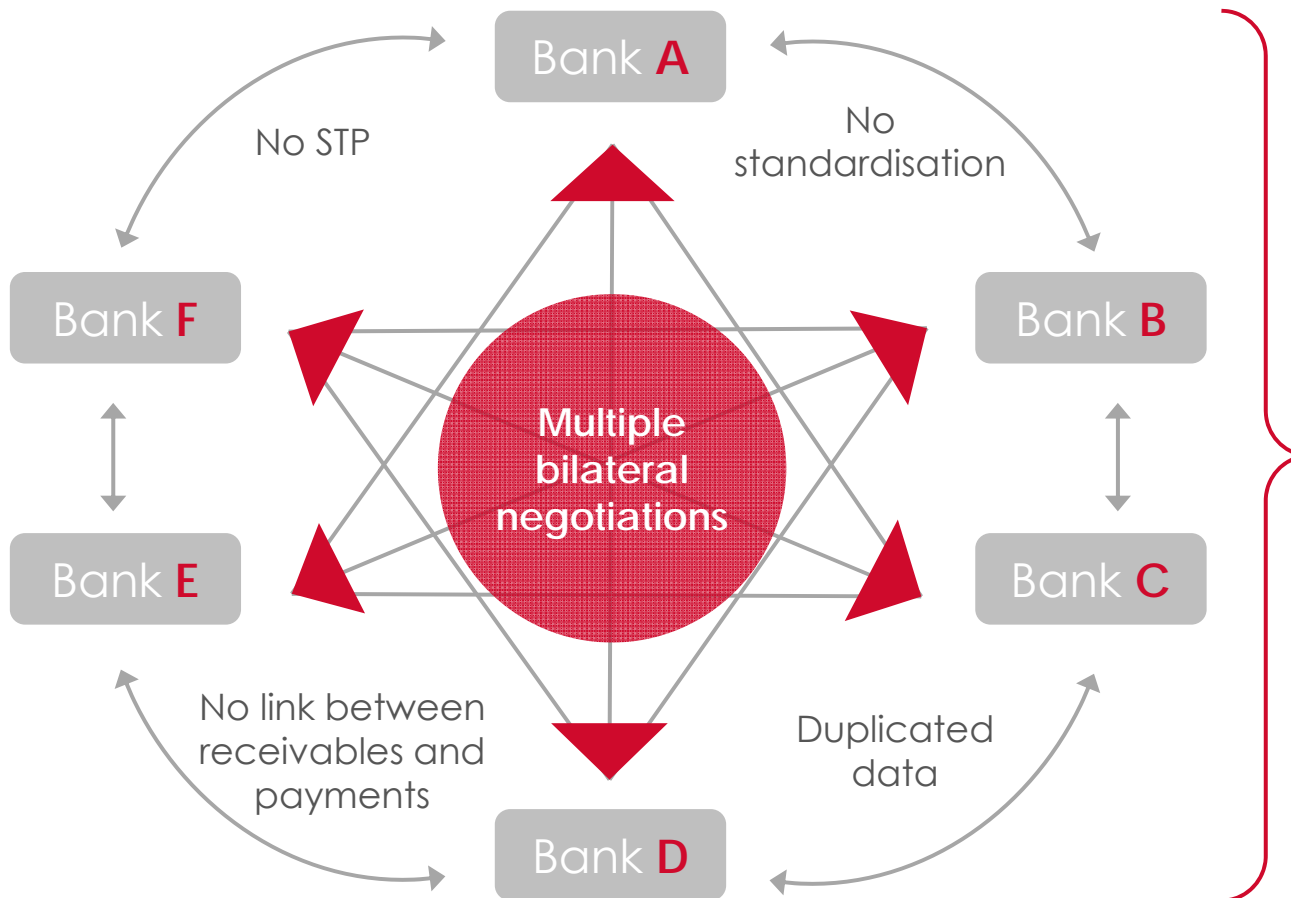
Access to Euroclear Bank via **Taskize** is free of charge



# Mutualisation initiative :

## Claim Management – current situation

Unstructured, unavoidable, expensive



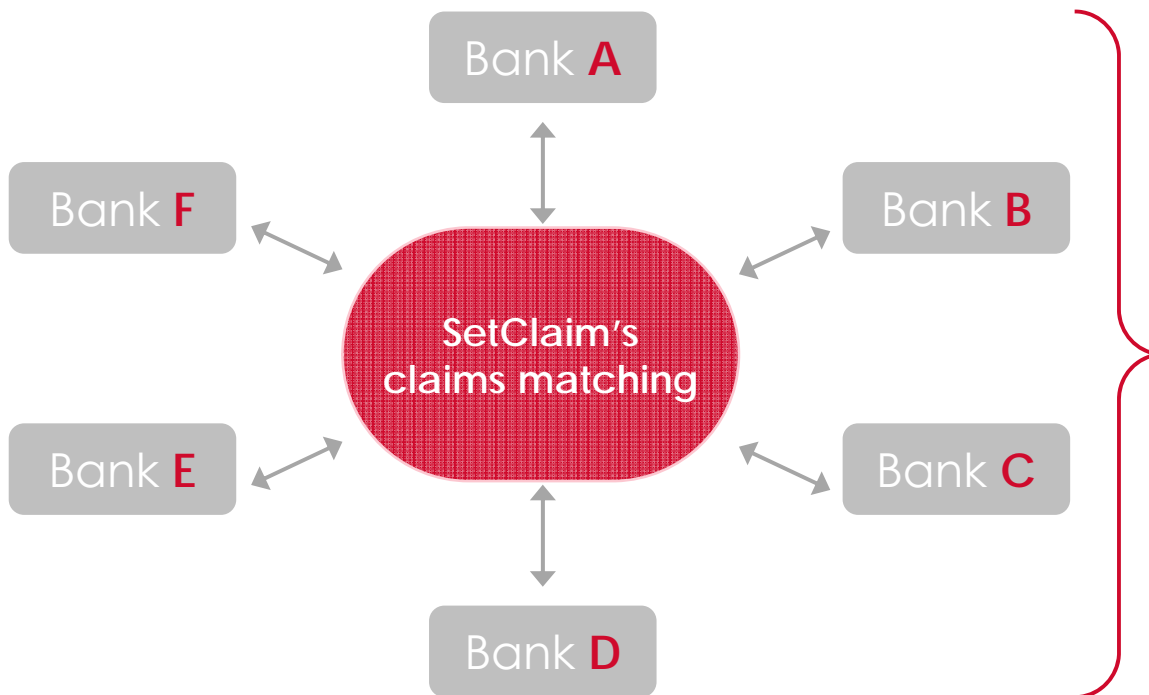
- High operating costs
- Low funding efficiency
- Regulatory capital needed
- Client money locked up





# SetClaim centralises the process

## Automated, multi-lateral, efficient



- Automated claims matching
- Reporting on reason for unmatched
- Easily link payments to matched items
- Netting opportunities
- Full audit trail of activity
- Secure, easy to use and easy to set up



# SetClaim - Benefits for the industry



## Reduced operating costs

- Automated end-to-end process
- Frees you up to focus on exceptions only
- Simplifies reconciliation of claims received vs. claims expected; payments received vs. claims accepted



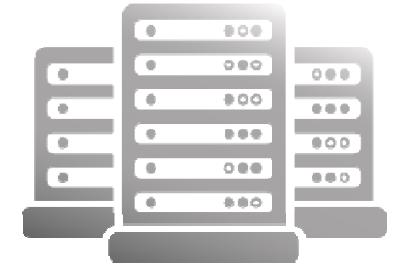
## Reduced funding costs

- Reduce time-lag between expected value dates and actual value dates
- Fewer cash breaks



## Reduced risk, capital requirements and regulatory impacts

- Prompt settlement reduces counterparty risk
- Reducing open balances reduces balance sheet size and associated capital requirements (e.g. Client money)
- Full audit trail aids regulatory compliance



## Improved data

- Claims generated and alleged by class and counterparty
- Track counterparty payment performance



# Opportunities for the CSDs in the C.I.S.

- Further harmonization
  - ▶ Common Capital Market Union
  - ▶ CSD and/or Exchange ?
  - ▶ Market rules
  - ▶ Pan CIS issuances
  
- Becoming the operator
  - ▶ Cryptocurrencies and digital assets
  - ▶ technology experts
  
- Setting up a CIS off-shore financial centre
  - ▶ Off-shore market



*Post-trade made easy*