Target 2 for Securities (T2S) Impact Study and Industry Target Operating Model

The European Repo Council (ERC) of the International Capital Market Association (ICMA) Conducted by Rule Financial
Intro to the ERC and the agenda for today

ICMA European Repo Council (“ERC”)

• An industry representative body that has fashioned consensus solutions to the emerging, practical issues in a rapidly evolving marketplace, consolidating and codifying best market practice
• Promoting the wider use of repo in Europe, particularly among banks, by providing education and market information

Agenda today

• A brief introduction to T2S
• ICMA/Rule Financial survey findings
• Conclusions and recommendations

• Q&A via live chat throughout the presentation

Rob Mason  
Head of EMEA Securities Operations, RBS  
Rob has over a decade of experience in the securities markets, covering middle office, confirmation/allocation, settlement and asset servicing. Rob runs the RBS bond and equity operations teams in EMEA.

James Tomkinson  
Specialist OTC clearing and collateral mgt  
James was part of the team that developed the first European triparty repo product at Clearstream. Prior to joining Rule Financial, James was VP, collateral management, global transaction services at Citi Group. He was also director of repo products at Nomura International.

David Field  
Specialist in clearing and collateral  
David has led numerous clearing & collateral consultancy engagements across buy-side, sell-side, custodians and CCPs; covering strategy, target operating model and technology implementation.
How does T2S Work?

T2S will ensure real-time DvP and settlement across borders by employing the so-called “integrated model” in which both securities accounts and cash accounts will be integrated on one single IT platform, so that only one interface will be necessary between the CSDs and the T2S platform.

T2S will accommodate both the market participants’ securities accounts, held at either one or multiple CSDs, and their dedicated central bank cash accounts, held with their respective national central bank. The dedicated cash accounts will be used exclusively for settlement purposes in T2S and will be linked to the participants’ cash accounts held in TARGET2 or another non-euro central bank real time gross settlement (RTGS) account.

The use of the “integrated model” will allow T2S to connect any securities account at any participating CSD with any cash account at any participating central bank, within the same currency.

T2S will offer a set of advanced technical features that will make it one of the most sophisticated settlement engines in the world, including advanced optimisation algorithms to enhance settlement efficiency, state-of-the-art auto-collateralisation mechanisms leading to considerable liquidity savings and a wide range of liquidity management services through the dedicated cash accounts and direct connectivity, i.e. the possibility for banks with large settlement volumes to have a direct network connection to the platform (under the rules and procedures defined by their CSD).

Source: ECB Website
The T2S Mandate – Settling without borders

T2S will consolidate across all EUR countries in Europe the most fundamental part of the securities infrastructure value chain: securities settlement. T2S will provide a state-of-the-art settlement engine offering to the whole European market a centralised delivery-versus-payment (DvP) settlement in central bank money.

T2S will be operated by the Eurosystem on a cost-recovery basis to the benefit of all users. T2S will be neutral towards all countries and market infrastructures and towards the business models adopted by all CSDs and market participants.

The main characteristic of T2S, and perhaps its most revolutionary one, is that it will make cross-border settlement identical to domestic settlement. In terms of cost, technical processing and efficiency, a single set of rules, standards and tariffs will be applied to all transactions in Europe. This will dramatically reduce the complexity of the market infrastructure, lower the cost of cross-border transactions and hence make the European securities markets more cost-effective / competitive.

Transactions in T2S will be final and safe since the use of DvP on a real-time gross basis will eliminate counterparty risk and ensuring that all participants fulfil their obligations. The use of central bank money, i.e. the transfer of cash between participants’ accounts (held at the respective national central banks), will eliminate settlement agent risk since in T2S both the securities and cash legs of the transactions will be settled in DvP mode.

However, the impact of increased development cost and decreasing settlement volumes over time may not see the overall cost for European securities markets decrease. Settlement will not always be in central bank money—this may require adaptation by market participants to leverage.
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<tr>
<th>Migration Waves</th>
<th>Expected cumulative volume</th>
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<td><strong>Lietuvos centrinis vertybiniu popierių depozitoriumas (Lithuania)</strong></td>
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Post trade mechanics: Case Study

Even a “simple” cash trade in today’s landscape can be complex

- Post trade, different message formats and timings for confirmation and affirmation exist
- Numerous instruction messaging may be required to facilitate settlement
- Connectivity to multiple CSDs required to support each issuer market
- Each market may have different settlement rules (cut-off/instruction type)
- Access to ECB money via each NCB, meaning connection needed to many domestic markets
- Multiple cash accounts result in liquidity constraints and inefficiencies - collateral is pledged in multiple NCBs
- Fragmentation of collateral inventory creating operational overheads
Post trade mechanics: Case Study

... but it could look much simpler post T2S

- The option to be directly connected removes many of the instructions passing through the chain to the issuer CSDs that is needed today
- Connectivity can be to 1 settlement location: T2S
- T2S has a single settlement rule (cut-off/instruction type)
- T2S allows linkage to one dedicated cash account, offering an opportunity to have a single cash account to collateralise at an NCB
- T2S offers opportunity for a single securities account consolidating collateral inventory, improving liquidity of collateral pool

Will this opportunity for simplification be taken up?

Will the potential for efficiencies realised?
Today’s “simple” flow

- Seller
  - Trade Bookings
    - Offer
    - Buyer
      - Bid
        - Buyer’s processing
          - Instruction
            - Custodian/ICSD
              - Instruction
                - Sub-Custodian/Cash Agent
                  - Instruction
                    - Issuer CSD e.g. Spain
                      - Instruction
                        - ECB
                  - Instruction
                    - Issuer CSD e.g. Italy
                      - Instruction
                        - ECB
                  - Instruction
                    - Issuer CSD e.g. France
                      - Instruction
                        - ECB

Post-T2S possible flow

- Seller
  - Trade Bookings
    - Offer
    - Buyer
      - Bid
        - Buyer’s processing
          - Instruction
            - Custodian/ICSD
              - Instruction
                - Sub-Custodian/Cash Agent
                  - Instruction
                    - Issuer CSD e.g. Spain
                      - Instruction
                        - ECB
                  - Instruction
                    - Issuer CSD e.g. Italy
                      - Instruction
                        - ECB
                  - Instruction
                    - Issuer CSD e.g. France
                      - Instruction
                        - ECB
Survey Findings

Sponsored by The European Repo Council (ERC) of the International Capital Market Association (ICMA)
Conducted by Rules Financial

Results and Analysis
The European Repo Council (ERC) of the International Capital Market Association (ICMA) commissioned this industry wide survey conducted by Rule Financial to assess market preparedness for, and industry attitudes towards, T2S. It is hoped that the survey results will shed light on industry participants’ understanding of T2S and the possible consequences for their individual firms. This knowledge will then be used by the ERC to help guide and shape its approach in the provision of T2S information, guidance and training to its members.
We surveyed a broad cross section of the industry. Organisations

- Nearly half of the survey respondents were from Sell Side institutions. Buy Side respondents represented just over 10%.

Area of Business

- Survey respondents represented a good cross section of business functions.

Primary Trading Office Location

- 67% Europe - Eurozone
- 18% Europe - Non-Eurozone
- 12% The Americas
- 3% Asia-Pacific
... and found most people are aware of T2S ...

My organisation is fully aware of the operational implications of T2S

- Disagree: 7%
- Neither Agree nor Disagree: 17%
- Agree: 55%
- Strongly Agree: 21%

Over 75% of respondents agreed or strongly agreed that they were aware of the implications of T2S

Doing nothing in preparation for T2S is a viable option for my organisation

- Strongly Disagree: 0%
- Disagree: 10%
- Neither Agree nor Disagree: 8%
- Agree: 30%
- Strongly Agree: 52%

Less than 20% of respondents believe that doing nothing was a viable option
... and anticipate significant benefits...

Cut-off standardisation and level playing field will make all process more efficient.

"Cost of cross border settlement should decrease."

"Commercial solutions for post trade services will reduce as we deal with harmonised settlement. Although additional challenges will arise especially in Asset Servicing."

"At the beginning it will be difficult, but in a second stage it will consist of a benefit."

"Centralised Funding and liquidity benefits"

"Harmony will increase awareness and hence everyone is on the same page to get things settled on time."

"We don't foresee any benefit for our organisation"

"We see no benefit in harmonisation, but shortening of settlement timelines is positive move."

"Increases mobilization and optimization of collateral. Increases settlement efficiency a lot. Increases interoperability."

Improved settlement efficiencies

"Innovation brings efficiencies, so in my view it will help the bottom line"

"The harmonisation / extension of settlement timelines will improve the settlement efficiency."

"Positive - the cost increase is up-front, in the long run costs will probably decrease."

"Lower costs for our bank as intraday cash requirement will be reduced"

"We will have to amend our Swift messages so no great operational changes for us"

"More efficient use of collateral that is currently spread over several CSDs / Custodians"

"The cost increase is up-front, in the long run costs will probably decrease."

"More efficient use of collateral that is currently spread over several CSDs / Custodians"
Over 80% expect a significant impact…

How great an impact will T2S have on your organisation? Please provide a rating between 1 and 10.

More than 80% of respondents felt that T2S will have a significant impact on their organisation (>5). One surprising and concerning message is that the types of firms that saw T2S being of less impact included Custodians and Central Banks.
71% of Operations staff see positives in T2S. Will this be a simplification of work? Reduction in fails and accounts, meaning less post-settlement date chasing?

62% see positives in T2S—likely to be a way to reduce cash accounts and funding complexity. In fact, funding are more positive than Operations staff!

Network Management respondents were the cynics when it comes to T2S. Only 45% see benefits in T2S...
Please indicate the anticipated nature of the impact of T2S on the following areas of your organisation:

**Repo Trading**
- 51% Strongly negative
- 16% Negative
- 16% Neither positive nor negative
- 3% Positive
- 2% Very positive
- 2% No impact

**Cash Trading**
- 44% Negative
- 26% Neither positive nor negative
- 9% Positive
- 5% Very positive
- 16% No impact

Repo traders see more potential benefits in T2S: likely to be a reflection of increased liquidity collateral, via more efficient settlement and harmonisation of settlement deadlines.
Most respondents have plans underway in response to T2S, with many reviewing the structures of their Network Management and Custodians.

The majority of respondents have plans and initiatives underway in response to T2S, with many reviewing the structures of their Network Management and Custodians.

Has your organisation put in place any of the following measures in preparation for T2S? Please select all that apply.

- Review Custodian Structure
- Train Existing Staff
- Revised Network processing structure
- Hire Staff
- Platform changes to meet the new default settlement period (T+2)
Has your organisation made any of the following changes in preparation for T2S? Please select all that apply

Survey responses indicated that the bulk of the organisational changes in preparation for T2S are in the payments and cash management areas of organisations (62%). Lower activity in settlements likely to stem from the decision by many participants to remain indirectly connected via existing providers.
... who see major liquidity benefits…

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tbody>
<tr>
<td>T2S will result in an increase in the repatriation of capital across the industry</td>
<td>0%</td>
<td>17%</td>
<td>54%</td>
<td>29%</td>
<td>0%</td>
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<tr>
<td>T2S will result in a greater pool of collateral and increased liquidity across the industry</td>
<td>0%</td>
<td>3%</td>
<td>20%</td>
<td>57%</td>
<td>20%</td>
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<tr>
<td>T2S will result in greater Triparty interoperability</td>
<td>0%</td>
<td>11%</td>
<td>23%</td>
<td>60%</td>
<td>6%</td>
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<tr>
<td>The number of European agent banks that my organisation uses will decrease as a result of T2S</td>
<td>0%</td>
<td>12%</td>
<td>36%</td>
<td>48%</td>
<td>3%</td>
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<td>T2S will impact my organisation’s current T+2 settlement arrangement for Euros</td>
<td>0%</td>
<td>20%</td>
<td>37%</td>
<td>37%</td>
<td>6%</td>
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<tr>
<td>My organisation’s buy-in arrangements will change as a result of T2S</td>
<td>0%</td>
<td>6%</td>
<td>53%</td>
<td>41%</td>
<td>0%</td>
</tr>
<tr>
<td>T2S will increase the use of European collateral to finance non-Euro currency business across the industry</td>
<td>0%</td>
<td>6%</td>
<td>49%</td>
<td>40%</td>
<td>6%</td>
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</table>

Respondents felt that the impact of T2S will have most significance regarding: collateral pooling, increased liquidity, Tri-party interoperability, and a decrease in the number of agent banks.
The majority of participants will connect indirectly…

Is your organisation planning to connect directly (DCP) or indirectly (ICP) to T2S?

Most Sell Side institutions were planning to connect to T2S indirectly (ICP)

Is your organisation planning to review this decision?

A significant minority of institutions (29%) indicated that they will review this within 2 years. Yet 60% state their firm have no plans to review.

[Charts and graphs showing data on direct versus indirect connections and decision-making process]
... but there are still major technology impacts.

Most organisations feel that costs will either increase or not change.

Electronic Messaging (e.g. SWIFT) and Agent network/connection to T2S were areas of investment are likely to be the drivers for increased Technology spend.

Overall Impact of Costs

- 41% Overall costs will decrease
- 22% Overall costs will increase
- 38% Overall costs will not change

Do you believe that T2S will result in additional costs in any of the following areas? Please select all that apply:

- Operational staffing
- Technology
- Cash / security funding
- Failed settlement
- Agent network / connection to T2S
- Securities inventory management
- Electronic messaging (e.g. SWIFT)
- I do not believe that T2S will lead to any additional costs

Areas of Additional Cost

- Operational staffing: 7
- Technology: 23
- Cash / security funding: 11
- Failed settlement: 14
- Agent network / connection to T2S: 9
- Securities inventory management: 17
- Electronic messaging (e.g. SWIFT): 5
- I do not believe that T2S will lead to any additional costs: 5
Mixed view on challenges arising from phased approach…

Do you foresee any operational challenges for your organisation arising from the phased approach to Central Securities Depository (CSD) implementation?

Most custodians anticipate operational challenges from phased implementation; sell-side and others aren’t sure.
... and no clear view of potential for repo in T2S.

No clear opinion on whether T2S should be modified for Repo with the exception of custodians who were clearly not in favour.

Do you believe that T2S should be modified specifically for Repo transactions?

- Starting Leg and Maturity Leg should be linked together
- Tri-party interoperability is key!
- At the very least the ability to clearly and uniformly indicate that a settlement instruction relates to a repo or other securities financing transaction should be added
- Tri-party collateral management transactions should be treated differently from regular / outright settlements. The charges should be reduced as the collateralisation aspect has a higher priority than the security purchase / sale aspect.
Conclusions

Sponsored by The European Repo Council (ERC) of the International Capital Market Association (ICMA)
Conducted by Rule Financial
Some key findings

- **Sell Side and Buy Side** firms felt that T2S will have a significant positive impact.

- **Main impacts** seen as collateral pooling, increased liquidity, opportunity to rationalise agents.

- **Payments and Cash Management** departments doing the most preparation.

- **Phased approach** to CSD implementation seen as having an Ops impact by some.
Repo in T2S: a missed opportunity?

**T2S will improve settlement efficiency, timeliness and remove complexity**

a) Complex and inefficient cross-border settlement will no longer be required for assets held in T2S. Batch processing and differing settlement deadlines will be removed. This should result in fewer fails, later settlement times, more opportunity to trade late in the day, more collateral optimisation opportunities.

b) There is an opportunity for agent consolidation and to reduce the number of agents (even to a single agent) to handle all settlement of assets in T2S.

c) Participants have the opportunity to manage a single DCA account which will improve liquidity and reduce operational overhead.

**T2S will not improve repo end leg settlement nor lifecycle events**

a) T2S will not provide match ‘off’ leg trade economics at the time of ‘on’ leg instruction.

b) ‘Off’ leg proceeds calculation will have to be provided by the participant.

c) Automatic ‘off’ leg settlement on term repo was not built into T2S.

d) ESES in France will no longer support submission of Repo trades as a single instruction.

e) Repo tracking will not be available: corporate action events will have to be processed by participants.

f) Repo tracking will not be available: coupons/redemptions will have to manually processed by participants and chains of payments will continue to be needed.

g) T2S does not offer a trade repository: the industry will have to find and fund an alternative solution.

h) Repo legs cannot be linked within T2S: legs must be linked by participants in their own systems.
Recommendations for future development

1. Introduce transaction type in T2S (repo, cash, buy sell back, margin, lending, triparty) to:
   
   a) Provide the ability to track beneficial owner of coupons/redemptions and ensure cash reaches beneficial owner on pay date, removing risk and effort
   b) Ensure the beneficial owner receives corporate action notifications immediately, removing risk that the beneficial owner never receives their rights to elect
   c) Provide functionality for T2S to act as a repo repository and provide transparency to parties who desire more information, such as the FSB

2. Introduce a common repo ID to link on and off leg to ensure all firms can explicitly track closure of multi-leg trades

3. Provide central interest calculation facility to reduce risk of exceptions between parties on multi-leg trades at off-leg settlement and reduce failed trades
## Key findings

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<th>Infrastructure and Planning</th>
<th>High feeling of awareness and understanding of T2S objectives in respondents</th>
<th>Sell Side and Buy Side firms felt that T2S will have a significant impact</th>
<th>T2S will have a positive to very positive impact across most areas</th>
<th>Most respondents have plans in place – Network Mgmt &amp; Custody Services are the priorities</th>
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<tr>
<td>Connectivity</td>
<td>High number of respondents will connect indirectly but many plan to review this decision</td>
<td>Payments and Cash Management departments doing the most preparation</td>
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<td>Commercial Impact</td>
<td>Main impacts seen as collateral pooling, increased liquidity, opportunity to rationalise agents</td>
<td>Technology changes felt to require the highest level of investment</td>
<td>Respondents unsure whether T2S should be modified for Repos</td>
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<td>Other Impacts</td>
<td>T+2 Settlement will have an impact</td>
<td>Phased approach to CSD implementation seen as having an Ops impact by some</td>
<td>Hold and Release functionality reasonably well understood</td>
<td>Majority are not decided and are not planning to implement new hold &amp; release processes</td>
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The survey results should give industry participants comfort that the implementation of T2S is well understood. Areas seeing benefits in T2S include Operations and Cash Management, likely a result of the opportunity to simplify settlement and funding mechanisms by reducing the custodian bank network. Front Office are bullish too: the benefits of improvements to collateral liquidity likely to be the driver. Over 80% of respondents feel there is significant impact of T2S. That needs careful planning. The time for action is now.