TARGET2-Securities Platform: Implications for the Post-Trade Arena

Executive Summary
Over the past two decades, the European Union’s (EU) single financial market initiative has delivered price stability, reduced exchange rate uncertainty and sliced transaction costs. However, the EU’s financial market infrastructure remains largely fragmented. While regulations such as the Markets in Financial Instruments Directive (MiFID) aim to bring interoperability to the pre-trade space, the post-trade arena continues to languish in silo fashion, adding unnecessary costs at a time when financial houses large and small are struggling to make ends meet. In fact, cross-border transactions in the EU vis-à-vis the U.S. are highly expensive and involve numerous intermediaries.

The great disparity in costs results from Europe’s longstanding fragmented post-trade infrastructure that originates from different nationalistic standards and practices. While clearing and settlement systems in various EU countries are efficient in meeting domestic market requirements, they have not been updated to accommodate the rising requirements of cross-border settlements that are so critical in today’s global economy.

In Europe, several factors have worked to shift the trading focus to pan-European, cross-border strategies. While the advent of the euro paved the way, the rise in cross-border trade has also been fueled by the Undertakings for Collective Investment in Transferable Securities (UCITS) IV directive, the cross-border merger of corporations and algorithmic trading. With this increase, the inefficiencies of the fragmented infrastructure, combined with disconnected practices, have exacerbated an already expensive proposition—that of rising transaction costs, post-trade.

Numerous studies, conducted across multiple levels of the ailing European securities market, have pointed to many of the root causes of post-trade cost creep; however, the most significant is a report issued by the Giovannini Group1 that identifies the barriers to an efficient pan-European market infrastructure and makes recommendations for removing them.

In alignment with efforts to remove the “Giovannini barriers,” several market-led initiatives have been undertaken that aim to harmonize practices at the pan-European level and systematically address the legal and structural issues. Target2-Securities (T2S) is one such market-led initiative developed to address several of the Giovannini barriers.

The T2S platform is conceptualized and designed to create a “pan-European domestic” market for securities settlement, with a clear objective of aligning the costs for cross-border settlement in...
the Eurozone with the levels of domestic settlement costs. T2S’s impact on market participants would be huge, causing some players to consider fundamentally changing their business models. For example, the impact on Central Securities Depositories (CSD) would include the following:

- Lost revenue from settlement services, driving CSDs to expand their services.
- Likely consolidation in the long run.
- The need to reshape their IT infrastructure.

Meanwhile, the impact on global custodians would include the following:

- The opportunity to rationalize their settlement value chain.
- The need to invest in systems upgrades to achieve full benefits.
- Declining revenues for sub-custodians, from services to global custodians.
- The option to use local expertise to provide niche offerings, such as tax services.

The European Central Bank (ECB) has been able to generate significant buy-in from domestic European players. However, the project has experienced repeated delays; in fact, its expected go-live date of 2013 was first postponed to September 2014 and then further delayed to 2015. The project has attracted its share of controversy, with national banks in the UK and Switzerland opting out of participation in the initial wave of migration, amid questions surrounding the platform’s value proposition.

T2S does mark a starting point to a truly harmonized European settlement landscape. However, in the long run, further harmonization, in areas such as securities laws and tax, will be key to reducing transaction costs for banks across the continent.

**What is T2S?**

The T2S project intends to build a pan-European domestic settlement marketplace, similar to MiFID for pre-trade and the Single European Payment Area (SEPA) initiative for payments. The platform, conceptualized in 2006, is owned and developed by the Eurosystem monetary authority and will also be operated by this organization. It is built on the same concept as the Trans-European Automated Real-Time Gross Settlement Express Transfer System (TARGET2). T2S is designed to settle exclusively in central bank money (CeBM) over respective NCBs to achieve higher market efficiency and safe settlement. It will also be capable of settling securities transactions from non-Euro markets, subject to the participation of the respective central banks.

In essence, T2S is a platform capable of receiving settlement instructions, matching them and reaching settlement, finally resulting in the generation of irrevocable booking entries. It will act as a technical platform to which the National Central Securities Depositories (NCSDs) can outsource their settlement process (see Figure 1). NCSDs continue to retain the ownership of custody accounts and other custodial services for their customers; in that sense, they remain the designated settlement system under the Settlement Finality Directive (SFD).

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**The T2S Framework**

![T2S Diagram](source: European Central Bank)

*Source: European Central Bank*

*Figure 1*
Key aspects of T2S that have significant business implications include:

- Support for ISO 20022 messages, exclusively.
- Harmonized settlement calendar for all participating markets (NCSDs).
- Optional participation of NCSDs, even in the Eurozone. However, it is believed that market forces will automatically encourage NCSDs to participate.
- A multi-currency platform that can be extended beyond the Eurozone to achieve additional economies of scale to further drive down settlement costs.
- Requirement for national-level specificities to be externalized and managed by respective NCSDs, due to a design that encourages a harmonized settlement process at a pan-European level. It is not yet clear if NCSDs will be able to decommission their current settlement platform and migrate to T2S to support a pan-European settlement platform for domestic as well as cross-border settlement. The inability to shut down or decommission the legacy (domestic) settlement infrastructure may be the key barrier preventing banks from reaping the cost benefits associated with T2S.
- Ability for market participants to choose whether they become direct participants in T2S, while still retaining their relationship with respective NCSDs.

Need for T2S
The euro, combined with other market forces (see sidebar, next page), has caused European cross-border securities trading to soar. However, the post-trade areas of clearing and settlement have not been integrated across national EU boundaries (see Figure 2). There are 41 CSDs operating in the current trading landscape.

Comparatively, the U.S. has a centralized clearing and settlement infrastructure – the Depository Trust and Clearing Corporation (DTCC), which handles clearing and settlement of corporate bonds and equities – and the Federal Reserve System, which processes securities issued by the U.S. government, federal agencies and government-sponsored enterprises (see Figure 3, page 5).

The cost of cross-border transactions in the EU is said to be 10 times higher than domestic equity transactions. An end-to-end cross-border securities trade in Europe may require the involvement of as many as 11 intermediaries and 14 instructions between trading parties. This results in increased liquidity, counterparty and settlement risks. The settlement landscape in Europe is typified by different rules, settlement cycles and charges levied by different countries. These differences add complexity to the trading process, making it difficult for banks to mitigate the risks involved in delivery vs. payment (DvP) across borders.

The involvement of numerous intermediaries (custodian/agent banks) in cross-border transactions adds significant cost. Furthermore, various business models have emerged in EU countries over the past few years that have added to the complexity of settlement. In Germany,
Major Forces Driving Cross-Border Trade in the European Union

- The number of cross-border mergers is on the rise.
- With the advent of the euro, the investment strategy and asset allocation of many banks has become more sectoral than traditional currency-/country-based activities, resulting in the virtual elimination of country considerations.
- The development of trading strategies, such as algorithmic trading, is exploiting technological advancements in the trading arena. These strategies derive their value from very fine price differentials; profitability of a trade depends on the total cost of executing it - including the direct and indirect cost of clearing and settlement.
- The introduction of UCITS IV legislation allows fund managers domiciled in one European Union to distribute funds across the EU. UCITS IV also supports cross-border investments across the European Union through master feeder structures.

However, a lack of common standards, ineffective market practices and a fragmented infrastructure that is not conducive to interoperability is hindering progress. This results in higher costs for market participants, as their systems, organizational structures and processes need to reflect these variations. They also need to maintain a multiple set of agent institutions to participate in different markets. Moreover, the high degree of intermediation required for settling transactions is hindering the EU’s goal of a single, harmonized financial market.

The Giovannini report lists 15 barriers to an efficient EU securities market infrastructure. These barriers must be overcome to create a harmonized trading landscape. T2S will play a key role in this regard (see Figure 4, page 5) and will lay the technological foundation for overcoming intermediation challenges.

T2S aims to enable the following:

- Reduced cross-border settlement costs through a single IT platform, as well as standardized communication protocols for settling securities in the EU.
- Real-time gross, commoditized and harmonized DvP settlement in central bank money.
- Optimized collateral management through intraday transfer of collateral among CSDs over an extended time window, working in conjunction with the Collateral Central Bank Management Model (CCBM2) and TARGET2.
- An IT platform to accommodate market participants’ central bank cash and securities accounts in one place.

By creating a single platform for securities settlement, T2S is expected to enable competition in the area and will have important implications for market participants in the post-trade value chain, including CSDs, global custodians and sub-custodians. For these market participants, T2S will also kickstart the move toward harmonized market practices and adoption of new messaging standards.

These developments augur well for investors, which are expected to benefit the most from this platform, through reduced costs and optimized spreads that result from more timely settlement. The scope for reducing settlement duration will be influenced by the larger reforms of different nations eyeing convergence around a single settlement cycle of T+2.

Impact of T2S on Market Participants

T2S aims to create a more efficient and investor-friendly marketplace, and its introduction will have a significant impact on all market participants in the EU (see Figure 5, page 6).
Presently, the disconnected markets are a deterrent to risk-averse investors. T2S-enabled settlement cycles are expected to result in lower margin and collateral requirements and mitigate systemic risk. This also means that firms need to standardize workflows, adopt new messaging standards and improve data management.

In terms of impacted entities, NCSDs are impacted the most in terms of adopting new business models and messaging standards, as well as the likelihood of decommissioning significant parts of their existing settlement systems. Also, one of the major focus areas of T2S is to encourage competition among NCSDs, providing market participants with options to choose their depository relationship, with settlement occurring on T2S.

However, the implications of T2S are not restricted to NCSDs alone; they are likely to reach a far greater level, leading to a significant rationalization of the post-trade value chain. This increased competitiveness among key market participants, enabled by an increasingly level playing field delivered by T2S, is expected to drive cost optimization.

Removal of Barriers
T2S is expected to help remove the following Giovannini barriers:
- National differences in information technology and interfaces.
- National clearing and settlement restrictions that require the use of multiple systems.
- Differences in national rules relating to corporate actions, beneficial ownership and custody.
- Absence of intra-day settlement finality.
- Practical impediments to remote access to national clearing and settlement systems.
- National differences in operating hours/settlement deadlines.

Source: “Giovannini Barriers to be Reduced by T2S,” European Central Bank.

Figure 4

Global Custodians
T2S presents a mixed bag for custodians. They already face complex data delivery demands from clients. Preparing for T2S could mean added costs. Various regulations that followed the financial crisis placed significant pressure on

Source: European Central Bank

Figure 3

Settlement Landscape Comparison: EU vs. U.S.
the custody business in terms of compliance and transparency requirements. Most custodians operate in the fragmented European markets through sub-custodians. With T2S, they will have an opportunity to optimize the number of intermediaries with which they work. Custodians hope that T2S will offer easier and more direct access to various CSDs operating in the European markets.

Global custodians looking to benefit from T2S by eliminating intermediaries will need to develop expertise in-house, which could mean additional investment. T2S will require different business models for global custodians to operate in European markets, each with its own pros and cons (see Figure 6, page 7).

In our opinion, global custodian banks will possibly look at direct settlement through T2S, consolidating the relationship in a single CSD (or a selected few) and will look at CSDs/niche service providers to fill service gaps in local markets such as income collection and tax processing. With their traditional revenue streams becoming commoditized and collateral management becoming the mainstream of newer revenues, and here these banks might even look at establishing CSDs in these markets.

**Sub-Custodians**

T2S will have significant implications for sub-custodians. Smaller regional players that normally act as sub-custodians for global custodians will have to rethink their business models and rewire

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<tr>
<th>Stakeholder</th>
<th>Current Scenario</th>
<th>Post-T2S Scenario</th>
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<tr>
<td>Central Securities Depository (CSD)</td>
<td>Handle settlement and depository functions.</td>
<td>Handling of settlements by T2S; handling of depository functions only by CSDs.</td>
</tr>
<tr>
<td></td>
<td>Gain significant wallet share of revenue from settlement.</td>
<td>Significant change in the revenue mix, with a reduced share of settlement revenue.</td>
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|                               |                                                                                   | The need to expand the service catalog and identify alternative revenue sources to compensate for the loss of settlement revenue.
|                               |                                                                                   | Consolidation, as market participants can choose to consolidate relationships with select CSDs.               |
|                               |                                                                                   | Ability to reap the advantages of T2S by rationalizing the existing IT infrastructure and re-design of existing systems. |
| Global Custodians             | Provide custody administration services to institutional investors.                | Opportunity to gain the most, as T2S provides options to rationalize their settlement value chain.            |
|                               | U.S. players operate in the European market via sub-custodians.                   | The need to make significant investments to achieve greater benefits (e.g., support for the ISO 20022 messaging standard to achieve direct connectivity to T2S). |
|                               |                                                                                   | Opportunity to enter the market directly, without a sub-custodian, resulting in in-sourcing some of the services currently provided by sub-custodians. |
| Sub-Custodians                | Provide custody administration services to domestic clients.                       | Loss of revenues, as global custodians can connect directly to T2S (through a CSD).                             |
|                               | Also act on behalf of global custodians that may not have a local presence.       | Increased competition, as CSDs in search of alternate revenue sources enter the traditional revenue terrain of sub-custodians, resulting in increased competition. |
|                               |                                                                                   | Creation of niches by some providers that specialize in services such as tax services.                        |

Source: efinancialnews.com, Cognizant Business Consulting

Figure 5
operations by developing new services, as large custodian banks may decide to reduce the number of intermediaries with which they operate. This will require fresh investment in infrastructure, which will add to their costs.

Moreover, not all sub-custodians will be able to bear this. Not surprisingly, among sub-custody players there seems to be a negative opinion about T2S. The fragmented nature of European markets has been helpful in some ways for the domestic custodians. Some find it useful as a test bed for taking their business models global.9

With clients having the ability to directly connect to T2S, their settlement revenues could decrease. Additionally, there is also the likelihood that CSDs — particularly those that could lose business due to T2S’s settlement role — will enter the custody space, whereas custodians cannot offer the services of a depository. Therefore, smaller, domestic custodians could find it particularly hard to avoid the loss of revenue as compared with larger players. Competition from international players that offer a single entry point for all European markets is also likely to intensify.

As a result, it is possible that local custodians will consolidate and transform, although not in the near term, into regional specialists that serve foreign participants in multiple European markets. Further, as the settlement business declines, these entities may start transforming their business models to operate more like a utility that provides a bouquet of services to custodians such as asset optimization, tax-related services and income collection.

**Depositories**

T2S’s single settlement platform, standardized communication and reduced cost of cross-CSD settlement will facilitate lower long-term operating costs. It will further reduce the entry barrier to players that want to offer cross-border CSD services.

T2S will put pressure on revenues from settlement services, as it will assume the majority of the Eurozone’s settlement activity. As a result, CSDs will have to develop new services and possibly tap into the services traditionally offered by local custodians. This will require fresh investments. While large depositories might be able to manage this, smaller ones may find fresh investment hard to come by. The T2S platform will also provide a possible opportunity for large CSDs to enter new markets and potentially become issuer CSDs in these local markets.

Going forward, CSDs will need to invest in reshaping their IT infrastructure to reap the full benefits of T2S. Owing to increased competition, they will likely need to scale up their services. Some areas they will need to revisit include speeding up data feeds, creating a seamless information flow of securities and adopting ISO formats in a more efficient communications structure.

One element of concern to NCSDs is T2S’s limitations with respect to settlement services.

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**Global Custodian Engagement Model Alternatives in the Post-T2S Arena**

| Scenario A | Direct connection to T2S through an account at NCSD. | This could be a practical scenario in the short to mid-term. Here, the custodian chooses a direct clearing participant of a selected NCSD. The accounting relationship is maintained with the NCSD; there is an opportunity to consolidate NCSD relations, while a local agent is appointed for services such as income collection and registration. |
| Scenario B | Direct connection to T2S through an account at NCSD (without a local agent). | Apart from direct clearing, the custodian becomes a direct participant of T2S through its account with NCSDs and initiates and manages settlement instructions directly with T2S. The custodian will have to in-source local market services. It is important to balance the in-sourcing decision against the advantages of direct clearing/connectivity. Done correctly, this could be an efficient long-term option. |
| Scenario C | Remain with the present model and operate through a sub-custodian. | There are no benefits or implications of T2S. Trades are settled with the sub-custodian in the CoBM model. |

Source: Cognizant Business Consulting

Figure 6
NCSDs continue to own all relationships and custody services for the participants. This is quite different from the U.S. model, where the DTCC provides a complete set of settlement, custody and asset servicing. Also, domestic settlement costs in Europe are on par with the U.S. and hence do not merit routing transactions via T2S. Therefore, NCSDs do not feel compelled to decommission their existing settlement infrastructure for domestic trades.

Winning in the T2S Era

The T2S platform is meant to help investors by reducing cross-border settlement costs and risk. For market players, however, it is a harbinger of significant change. By making it easier for international players to operate in the EU markets, T2S could spur consolidation in the depository and custody spaces. The dramatic changes being brought about in Europe through regulatory- and market-led initiatives are directed at achieving the core purpose of the EU (i.e., facilitating a single economic market) and bringing transparency and competition to the securities market. The T2S platform furthers this cause and, hence, should be given higher priority by European market players.

Greater harmonization, driven by technology, bodes well for investors, as they would be able to significantly optimize their operations and technology platforms in a consolidating market space. For market players, this also means that they need to invest in renovating and aligning their systems and adopting new evolving business models that allow them to more effectively leverage the benefits enabled by these regulatory- and market-led initiatives.

Firms will also have to look at moving toward the ISO 20022 messaging standard. This standard supports a broad range of processes and provides improved data quality and integration. A move to this standard is also necessitated by corporate actions notifications, since the ISO 15022 standard was insufficient in handling issues such as complexities surrounding corporate reorganizations.

While forcing players to reinvent their core value proposition, T2S will require important technological changes. Key technology imperatives for industry players include:

- Standardizing or automating workflows to increase straight-through processing rates and avoid error-prone manual intervention. As a result, cross-border volumes are expected to increase several-fold, making the securities trading business increasingly attractive to investors.
- Embracing ISO 20022-compliant messaging standards that would also support existing ISO 15022 messaging in a transparent and low-cost manner to keep operating expenses at a manageable level.
- Centralizing data management systems to improve process efficiency and reporting.

While much remains in limbo regarding winning player and business models, it is clear that investors stand to benefit, as T2S is bound to introduce increased competition for their assets.

Harmonization is the Way Forward

Uncertainties regarding the timelines for implementation of the T2S platform have led to concerns about whether it will ever take off. The ongoing global financial crisis has added to the delays. Concerns over turbulent EU economies have trumped the harmonization efforts. The decision by the Bank of England and the Swiss National Bank to not participate in the initial migration waves has not helped matters. These issues have added to the anxiety of market players, such as global custodians, that expect T2S to help reduce costs.

The initiative has gained traction among market players that recognize the long-term benefits of harmonization, not just in the settlements area but also across the trading lifecycle. Thirty out of the aforementioned 41 CSDs in Europe have already agreed to join the T2S platform.

For T2S to achieve its business case and recover costs within the stipulated time, it is important that the platform garner significant settlement volumes in the early phases of migration. Any delay in Eurozone NCSDs joining T2S, or some of the larger “foreign” markets such as the UK, may potentially jeopardize the T2S business case/economic model.

Continued efforts by the ECB and the EU are key to achieving this harmonization. Settlement will only be truly accelerated when all the processes
leading to it are also improved. But there are challenges that go beyond the realm of technology. For true pan-EU harmonization to be achieved, it is important that individual member nations also cooperate in aligning their local markets to remove any regional challenges that might hinder overall harmonization. Winning the commitment of member states to go the distance, therefore, is a task that needs to be achieved, and quickly, for the platform to meet its already extended timelines.

Moreover, T2S’s role goes beyond providing a common settlement platform. T2S is seen as a key enabler for the move toward a pan-European harmonized T+2 settlement cycle, which is a long-term goal adopted by the European Commission. The harmonization of the European financial market is a long-term effort, and much has been achieved over the past few years through legislation such as MiFID. Complete harmonization will not come easily. In the post-trade process, including corporate actions and tax processing, further harmonization is needed, in areas such as securities and tax laws.

T2S is an important step in fixing Europe’s fragmented settlement system. It addresses six of the 15 barriers listed by the Giovannini report and is expected to act as a catalyst for pan-European harmonization. At a time of economic turmoil, T2S could provide much-needed financial stability in the securities trading market by reducing the risks and costs associated with cross-border transactions.

Footnotes

1 The Giovannini Group produced two reports, in 2001 and 2003, on the main barriers related to the fragmentation of the European trading, clearing and settlement markets and the resulting inefficiencies.


3 CeBM, or Central Bank Money, is the liquidity of the participant or its designated settlement bank, with the respective National Central Bank directly debited/credited over the respective Real Time Gross Settlement System (RTGS). Note that even with CeBM, multiple models to reserve and operate the liquidity are possible. As compared with CeBM, settlement outside of NCSDs — say between the agent bank and its customers — takes place in commercial bank money (CoBM).

4 NCB: National Central Bank.

5 NCSD: National Central Securities Depository, e.g., Euroclear France for the French market, Clearstream Frankfurt for the German market or SIS for the Swiss market. Note that due to an earlier initiative to harmonize and consolidate the national securities infrastructure, most of the Eurozone countries already have a single NCSD.


7 In this context, the term “market participant” is used to refer to any global custodian (typically DECU/RECU in ISO 15022 vocabulary), broker-dealer or agent bank that operates in multiple markets and acts on behalf of the investor to settle a trade. In terms of the settlement chain, this is the entity closest to the investor. Such global players are likely to both be impacted by the changes that the move to T2S will require and expected to get maximum benefit from this new pan-European clearing platform.

Specific reference is made to local agents in the respective national markets that provide settlement and custody services in respective markets. The terms local custodian, regional custodian, local agent and sub-custodian are used interchangeably, depending on the context.

In the current business model for cross-border settlement, such agent banks (DEAG/REAG in ISO 15022 vocabulary) are normally always deployed (required) and are closest to the place of settlement (PSET in ISO 15022 vocabulary).
Typically, NCSDs and NCBs are the key market infrastructure providers, along with the agents (securities) and settlement banks (money) at the next level.


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About Cognizant

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