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EUROSYSTEM

# T2S Special Series

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## T2S – 360° around the globe

Questions by Mehdi Manaa, T2S Programme Manager, European Central Bank

*This issue of the T2S Special Series explores the impact of T2S on the post-trade industry around the world – not only as the technical platform which facilitates access to Europe for global market participants, but also as a blueprint for other similar initiatives, which can learn from the T2S experience. Mehdi Manaa, T2S Programme Manager at the European Central Bank, asked eminent interview partners from different organisations within the industry (CSDs, banks and central banks) in Europe, the Americas, Asia and Africa about how T2S is influencing their area of business.*



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The views presented in this paper are those of the authors and do not necessarily represent the official view of the European Central Bank or of the authors' organisations.



50° 7' N 8° 41' E  
**Mathias Papenfuß**  
 Clearstream Bank  
 Frankfurt am Main, Germany

**Mehdi Mana**  
 European Central Bank  
 Frankfurt am Main, Germany

48° 51' N 2° 21' E  
**José Placido BNP**  
 Paribas Securities  
 Services  
 Paris, France

**Brigitte Daurelle**  
 Euroclear  
 Paris, France

50° N 6° E  
**Serge Harry**  
 globeSettle  
 Luxembourg,  
 Luxembourg

**Richard Dzina**  
 Federal Reserve Bank of New York  
 New York City, United States

**Tony Freeman**  
 Depository Trust and Clearing  
 Corporation (DTCC)  
 New York City,  
 United States

40° 43' N 74° 0' W  
**Richard Scavetta,**  
 Citi  
 New York City,  
 United States

40° 25' N 3° 42' W  
**Fernando Garcia Rojo**  
 Vizcaya Argentaria (BBVA)  
 Madrid, Spain

**Jesús Benito**  
 Iberclear  
 Madrid, Spain

47° 22' 44" N 8° 32' 28" E  
**Thomas Zeeb**  
 SIX Securities Services  
 Zurich, Switzerland

41° 43' N 44° 48' E  
**Giorgi Laliashvili**  
 National Bank of  
 Georgia  
 Tbilisi, Georgia

35° 41' N 139° 46' E  
**Taiji Inui**  
 NTT Data  
 Tokyo, Japan

**Yoshinobu Takeuchi**  
 Japan Securities Depository  
 Center, Inc. (JASDEC)  
 Tokyo, Japan

4° 36' N 74° 5' W  
**Mr Jorge Hernán Jaramillo Ossa**  
 Deceval  
 Bogota, Colombia

1° N 104° E  
**Lum Yong Teng**  
 Central Depository Pte Ltd (CDP)  
 Singapore, Singapore

26° 6' S 28° 3' E  
**Monica Singer**  
 Strate (PTY) Ltd  
 Sandton, Johannesburg, South Africa

## Introduction

T2S is a very European project. It was initiated by the ECB and its services are available to European CSDs and central banks. It was necessary to build a system like T2S because of a weakness in Europe, namely the fragmentation and lack of harmonisation in the post-trade landscape, which still existed when T2S was initiated despite decades of European integration. But the T2S project is succeeding – not only thanks to its participants but also thanks to the strengths of Europe, such as a common currency in 19 countries and well-established supranational institutions.



Mehdi Manaa

However, after years of work on a project like T2S, we have learnt that it is important to question the obvious from time to time and to think outside the box. This is precisely what the new edition of the T2S Special Series attempts to do. We wanted to know: What if the impact of T2S was not limited to Europe? What if the need for an infrastructure like T2S was not purely European, but global, or at least present in other regions? What if the approaches adopted by T2S did not fit Europe exclusively, but were rather exportable or even extendible to other regions?

Given the nature of this topic, we tried to collect as many non-European points of view as possible. To achieve that, we started our journey in Frankfurt and moved west on a 360° trip around the globe to meet our distinguished respondents and gather their perspectives.

Mehdi Manaa



## Mathias Papenfuß, Member of the Executive Board of Clearstream and Chairman of the ECSDA



Mathias Papenfuß

### **T2S improves access to the European market. Does this put European actors in a better position to compete globally or does this give international players the opportunity to be more involved?**

T2S will allow all international and domestic actors across participating markets to benefit from more streamlined, safer and less costly securities settlement. However, not all actors will benefit to the same degree.

Large market players, even when based outside the euro area, tend to hold CSD and central bank accounts in Europe or have the intention of opening these in preparation for T2S. As a consequence, large players will benefit regardless of where they are based and the large volumes these organisations process across markets will enable significant savings and efficiencies.

Smaller market participants will benefit more easily if they are based in T2S participating countries. This is because they can concentrate additional flows from other T2S countries with existing partners like their home CSD and central bank. By contrast, less sizable players based outside T2S participating countries may lack the scale to make opening direct central bank and CSD accounts in T2S countries practical.

In the medium term, primary market participants also stand to benefit from T2S following the implementation of regulations, such as the CSD Regulation or the securities law legislation, enter into force. Competition between markets, combined with open access, will allow issuers to centralise euro issuance in fewer markets. Again, the main beneficiaries will be organisations with business across various euro area markets, which tend to be sizeable players.

In summary, T2S will make securities processing less complex, safer and less costly for the euro area and international players. The largest benefits will accrue to those with significant volumes across many T2S markets, regardless of whether they are based within or outside the euro area. In addition, the euro area banks will also benefit from leveraging existing access to European infrastructures to centralise flows. T2S will, therefore, make the euro area a more attractive place for large international players to conduct business and, at the same time, generate efficiencies for all domestic players.

### **What is Clearstream's approach to establishing international links and providing global services, and how is this changing with T2S?**

In many ways, the standardisation and harmonisation resulting from T2S is complementary to the approach Clearstream is driving forward through its global network of 54 domestic markets. We see T2S as a catalyst for greater consolidation and centralisation of customer business – a trend we have been seeing in the market for quite some time and that we are very positive about.

T2S made substantial change mandatory, rather than optional, and we at Clearstream decided to regard this change as an opportunity to harmonise our CSD and ICSD services. We are already adapting our business to make it ready for the

post-T2S world. Since it is very difficult to put one CSD on the same technology platform as an ICSD, we opted to integrate operational processes even across separate technology platforms.

Not all liquidity will settle in T2S, but it does provide a single environment in which customers of Clearstream can settle both domestic European transactions and ICSD business. Furthermore, their settlement activities are not just supported by a single point of connection, but by securities lending and collateral management services which support assets held in both the CSD and the ICSD.

One of the key differentiators of our T2S offering is what we refer to as our investor CSD model: our access to T2S markets will be provided through a single access point – our CSD in Germany. This access point, in turn, will have ECB-assessed links to all T2S markets, providing an extra level of safety, along with settlement in T2S in central bank money. Of course, this model also benefits from our extensive market coverage globally, as well as the 21 markets in T2S.

Alongside the investor CSD model, we will continue to offer our proven ICSD model, which is a well-established way for customers to access the T2S area with limited transition costs. It serves as a good solution for clients who wish to be shielded from the full impact of the changes following the introduction of the pan-European settlement platform.

**As Chairman of the European Central Securities Depository Association (ECSDA), what is your view on the role which similar associations should play in regional integration and in establishing initiatives comparable to T2S around the globe?**

Even before the launch of T2S, ECSDA has historically played a leading role in promoting more integration, by developing standards for cross-border CSD links and by promoting harmonised communication standards between European CSDs.

Creating a common platform like T2S, where CSDs will outsource part of their functions, means a lot of communication and cooperation between the CSDs who wish to create such a system. Since the launch of T2S, ECSDA has focused on harmonisation initiatives aimed at maximising the benefits of T2S, such as matching standards, corporate actions and the harmonisation of settlement cycles. Not all ECSDA members are part of T2S but, as an industry association, we have a role to play in raising awareness about major harmonisation projects like T2S and in promoting consistency with other parallel initiatives, whether at EU or global level.

For example, ECSDA collaborates with four other regional CSD associations within the World Forum of CSDs and we note that CSDs on other continents are very interested in better understanding the implications of T2S and of other European initiatives like the CSD Regulation. On our side, we can also learn from initiatives outside Europe, especially the development of innovative services for issuers and investors by CSDs in emerging markets.

## Thomas Zeeb, Member of the Group Executive Board, SIX Group, and CEO, SIX Securities Services



Thomas Zeeb

### **Why is it worthwhile for SIX Securities Services to be part of T2S, as part of wave 1, despite the fact that you are not in the euro area and the Swiss National Bank is not participating?**

Being part of the first wave of CSDs using T2S is very important for our market.

SIX Securities Services is one of the very first users of the platform and, given our volumes, it is already safe to say that we have road-tested the platform more than almost any other European CSD. By connecting immediately with a CSD that is part of the first wave, clients can test their own processes while T2S is still in its early stages.

By the time the second and third waves of CSDs go live, the first-wave CSDs – especially those like ours which have significant cross-border volumes – will already have used, tested and pushed the platform to its limit. This means we have a head start on other CSDs which puts us in a position of having valuable insights into the platform so that we can work with and advise our clients on how best to work in this new environment. More importantly, we are also working with our clients to develop additional services off the back of the platform.

My sense is that many financial institutions continue to merely focus on connectivity. Instead, firms would do well to examine all the business and technology opportunities that the initiative presents. T2S is far more than just plugging in and, although T2S should bring down costs in the long-term, it is not just about cost savings, certainly not in the initial stages of implementation. Rather, T2S represents the possibility for us to help our clients achieve their pan-European ambitions, particularly in areas such as collateral management and asset servicing in the short to medium term. Long term, this new environment will likely lead to significant consolidation in the industry, and then, to cost reductions.

This is consistent with our conviction that, as infrastructure providers, CSDs should be enablers for business, allowing our clients to focus on building their businesses in those areas that have strategic value to them.

### **If there were no regulatory barriers, do you think other CSDs around the globe would follow your strategy and join T2S?**

To be precise, there are actually two implied questions here:

1. Is it realistic for other CSDs around the world to join T2S to gain access to euro-denominated central bank money settlement in Europe; and
2. Is a T2S-like solution appropriate for other transnational economic blocs around the world?

To answer the first question, I think it is unlikely that, irrespective of regulatory barriers, other CSDs around the world would look to connect to T2S for European settlements, simply because most CSDs have nowhere near the in-house platforms and know-how required to process cross-border securities.

The vast majority are focused on their domestic market alone, and have built their infrastructure(s) to accommodate local laws, norms, and conventions.

The second question is a little more complicated.

Assuming for a moment that such a hypothetical state existed in our industry (though this is difficult to envisage, given the rash of regulation, legislation and market barriers to entry that have prevailed since the onset of commerce), there is no reason why this should not be possible.

In theory.

The stated objective of T2S is to create an integrated infrastructure that will support capital markets on a European scale, minimising, if not eliminating, the divergent laws and rules that govern post-trade processes at a national level. Though such an idyllic pan-European capital market is a long way off, T2S has initiated a process that could potentially establish this over time.

T2S implementation is driven by two interdependent factors: the EU's political and economic mandate to create a single capital market and the operational imperative to create an infrastructure solution to enable the fulfilment of that broader objective. In the absence of the political and economic drivers, T2S can be construed as an additional processing layer, and therefore also an additional cost layer. That being said, in the absence of T2S, the drive for harmonisation and integration across the markets of the EU falls short.

For certain similarly structured 'Agglomerate Markets' around the world such as ASEAN, the Pacific Alliance, the Gulf Cooperation Council, the Southern African Development Community and, more broadly, the African Economic Community, such transnational harmonisation could prove appealing.

The T2S approach for other markets and regions does offer the opportunity to exploit a tried and tested scale solution; rationalise their processes; and establish an efficient settlement foundation across national boundaries. This is not unlike what we have seen in the payments markets around the world, where certain countries built off the back of existing work done in long-established markets.

The crux of whether such markets would or would not adopt a T2S(-like) platform boils down to those two considerations: the political/economic objectives (and will) of that region or market and the appropriateness of any operational solution. Whether the "EU Solution" can be transported elsewhere is still open to question.

### **What changes do you expect global players to experience because of T2S?**

Besides the obvious benefits of direct access to a pan-European settlement system – central bank money settlement, capital relief and access to a huge pool of collateral liquidity – the real advantages lie beyond the platform itself.

To assess these, it is key to take into account the margin pressures that such global players experience, the burgeoning costs of regulation and compliance and the need to free up capital for liquidity – especially for those with increased asset servicing aspirations.

Any institution operating in an environment of such – often contradictory – dynamics needs to look at what has been rendered the commodity part of their offering. If they can articulate this meaningfully (and specifically) they will be on their way to establishing a new direction for themselves and for their clients.



The challenge that these institutions face with the establishment of a platform such as T2S is that, in the quest to meet the connectivity requirements, they lose sight of the bigger picture: T2S is not an end in itself. It is an enabler.

A very basic-layer enabler, but an enabler nonetheless.

Global players will to my mind not see substantial operational changes as a result of T2S in the short term. Longer term, and if the EU moves forward with the more meaningful, substantial, and difficult harmonisation efforts across European capital markets, then they will benefit from lower costs and risks in their cross-border businesses.

## Serge Harry, Chairman of globeSettle and Group Head for France, Benelux & Germany



Serge Harry

**globeSettle has recently been established in Luxembourg as a subsidiary of the London Stock Exchange Group (LSEG). What was the purpose of this business decision?**

The CSD environment is undergoing a transformational change, with the EMIR, T2S, the CSD Regulation and the Basel III requirements among the main catalysts. An increased focus on risk management and the global demand for collateral is leading to higher participation from both sell-side and buy-side firms, as well as corporates in the triparty and cleared and uncleared derivatives markets. In terms of secured vs unsecured financing, collateral management services are needed to help financial institutions increase efficiency and decrease counterparty and market risks.

There is also a need for more standardised messaging and connectivity with market infrastructures.

LSEG set up globeSettle, its CSD based in Luxembourg, in order to address these industry needs. globeSettle operates on an open access basis, servicing all market players including CCPs, collateral agents and custodians, offering 22/24 real-time access to settlement. globeSettle has a large geographical coverage, including all G7 countries. It facilitates the same-day transfer of securities across the globe, with a full range of asset services, including corporate actions and tax treatments. As a recognised securities settlement system, globeSettle enables CCPs, collateral agents, lenders and central banks, including the Eurosystem, to comply with EMIR article 47.3. globeSettle complements LSEG's Italian CSD for Italy, Monte Titoli, a first-wave participant of T2S.

**How and when does globeSettle plan to connect to T2S?**

Leveraging on the Group capabilities, globeSettle will initially access T2S through Monte Titoli, as a first-wave participant.

In the medium term, we are considering whether to join T2S as a direct CSD participant, particularly with a view to supporting a securities issuance business, where direct distribution against payment in the "T2S space" will make sense.

**How do you perceive the global dimension/impact of T2S?**

T2S is a transformational initiative for a number of reasons. It will streamline and facilitate the movement of securities across all participating countries. In that respect, it will ease collateral management and improve liquidity as well as standardising settlement and corporate actions. Importantly, it will help reduce the costs of cross-border settlement in Europe and will be a significant contributor to European market union. T2S will also reduce settlement risk by favouring settlement in central bank money. Finally, combined with the CSD Regulation, it will increase competition between European CSDs, leading to improved services at a competitive cost.

## Brigitte Daurelle, Chief Executive Officer of the ESES<sup>1</sup> CSDs, Euroclear



Brigitte Daurelle

### **In your view, will T2S contribute to better mobilisation of collateral around the globe or do you expect the effect of T2S to be limited to Europe?**

Investors are increasingly looking to optimise their collateral management on a global basis to comply with an evolving regulatory environment both in Europe and beyond.

While T2S will centralise delivery-versus-payment settlement of European securities, the use of a provider like Euroclear gives market participants the opportunity to optimise their collateral management through improved collateral mobility and velocity.

At Euroclear, we have developed an open architecture industry solution to access and streamline the processing of collateral worldwide: the Collateral Highway. In 2015, the Collateral Highway mobilised a record daily collateral outstanding of over €1 trillion. Moreover, in 2014 we set-up a joint venture with the Depository Trust & Clearing Corporation (DTCC) in the United States to focus primarily on allowing better margin transit and global collateral mobility.

Within the T2S environment, Euroclear will offer two solutions to help better mobilise collateral. Firstly, investors will be able to hold assets through ESES as an investor CSD, which will enable them to use all of these assets in triparty deals. Secondly, Euroclear will provide the option for European assets held in the various issuer CSDs to be used on the Collateral Highway through our Open Inventory Sourcing (OIS) technology, which enables issuers to pool together their assets held in different issuer CSDs.

In addition, we have established triparty interoperability between Euroclear Bank and ESES, linking the pools of liquidity and collateral held in the respective environments. Our triparty services in the ESES markets ease access to liquidity and provide value-added collateral management services in the domestic market. This link with Euroclear Bank further supports the mobilisation of collateral worldwide and enables investors to overcome the complexities of operating in multiple time zones as they seek to optimise collateral management.

### **As you develop your global business, do you expect T2S to make Europe more attractive to certain geographic regions? Why?**

Europe's capital markets are likely to become even more attractive post-T2S. By removing some of the fragmentation that exists between different countries in Europe, T2S removes barriers to investment and positions the region as a single capital marketplace. We do not expect those benefits to be confined to any single specific region however.

Euroclear shares the common objective to make Europe a more attractive place for both issuers and investors. For investors, Europe will become an easier market to access and invest in because they now have the possibility to centralise their activity in central bank money via a single CSD (investor CSD), like that being developed by Euroclear. At the same time, issuers will benefit from having a broader pool of investors. In fact, the launch of Euroclear's ESES platform in 2009 was the first example of such integration across borders (Belgium, France and the Netherlands).

<sup>1</sup> ESES is a settlement platform shared by the Belgian, Dutch and French markets. The three Euroclear CSDs are Euroclear France, Euroclear Belgium and Euroclear Nederland.

T2S can undoubtedly make Europe's capital markets more efficient for domestic and international investors. One of the main benefits of T2S is the harmonisation of market practices, such as a single settlement window and standardised messaging. Such harmonisation might allow investors to streamline the number of providers that they work with in Europe, reducing complexity and potentially bringing cost savings.

While T2S will provide harmonised settlement across European markets, the goal to create a single European marketplace does not stop there. Indeed, T2S is already acting as a catalyst for broader harmonisation across Europe. Under the T2S Harmonisation Steering Group, for example, the markets and CSDs joining T2S are actively monitoring the implementation of European standards for corporate actions, which will foster more efficiency in this area as well.

For issuers, the benefits of T2S and of the CSD Regulation will likely only become visible over time but one key opportunity for them is the possibility to target a pan-European investor base. And thanks to the interoperability between Euroclear Bank and ESES, we have also seen some major issuers choose ESES CSDs as the place to issue securities denominated in other currencies, such as offshore renminbi.

### **Can you tell us about the T2S-based products and services you are offering to your global customers?**

Meeting our clients' evolving needs underpins Euroclear's product and service offering. Both European and international clients are telling us that they are trying to achieve two objectives.

Firstly they are looking to reduce liquidity and capital costs, for example by benefiting from balance sheet netting opportunities. In addition, collateral mobilisation on a global basis is a top priority as regulations require them to post more collateral to finance or support activities.

Secondly, clients want to mitigate liability in meeting their evolving regulatory requirements. This is seeing firms choose to have accounts in a securities settlement system, such as a CSD or ICSD, bringing them closer to the settlement infrastructure.

Euroclear's offer enables clients to consolidate their assets in a single securities settlement system and benefit from value-added asset servicing and collateral management. Importantly, Euroclear provides financial institutions with the flexibility to access T2S markets in multiple ways and to benefit from the value-added services however they choose to hold their assets.

Euroclear's ESES CSDs will provide centralised access to T2S settlement. Firms will also be able to pool assets from multiple European markets through ESES, which will take care of the multi-market asset servicing across the T2S markets. This includes corporate actions, tax and proxy voting services, optimal processing efficiency, competitive deadlines, dedicated support and real-time reporting.

We will also continue to provide flexibility for clients so that they can implement changes at a gradual pace. For example, firms may wish to maintain their current asset servicing provider and focus on centralising their assets first. This approach has already been embraced by a major global custodian that has established direct market access in a number of European markets through ESES, while maintaining its local asset servicing provider.

Combined with Euroclear's global collateral management offering and the increased efficiency of pan-European settlement promoted by T2S, Euroclear's offer will continue to simplify post-trade for customers around the globe.



## José Placido, Global Head of Client Development & Strategy, BNP Paribas Securities Services



José Placido

### **BNP Paribas' slogan is "The Bank for a Changing World". In what way do you think that T2S will contribute to this changing world?**

The post-trade world is always changing, and generally for the better. Individual markets have introduced immobilisation, dematerialisation, versus-payment settlement, shorter settlement cycles, CCPs and netting. However, until now, progress has been uneven. And the pace of change has been slow.

With T2S, the ECB is radically transforming Europe's post-trade landscape – a huge step towards harmonisation that brings greater security to settlement. For the 23 CSDs involved, however, the change is particularly dramatic: versus-payment settlement, which has long been a core CSD offering, will be outsourced to the Eurosystem. However, most financial institutions access these CSDs via agent banks like ourselves. We are doing everything we can to ensure that migration is successful and that our clients enjoy the benefits of T2S.

To lower post-trade costs, T2S must be a catalyst for further change. So far, T2S has been expensive. The CSDs and agent banks have all invested heavily to prepare. Ultimately, however, harmonisation could bring real economies of scale. For BNP Paribas Securities Services, this means developing our International Operating Centre in Lisbon and streamlining our IT architecture. For most of our clients, this will mean consolidating their agent bank network with one provider.

### **How will T2S impact the added-value services that you provide to your non-European customers?**

T2S will benefit all our clients transacting in Europe, wherever they are. Our role as an agent bank is to make sure that every client can make the most of the improvements.

For example, better standardised operations for linking, partials and prioritisation will help optimise settlement. We also welcome the "hold and release" functionality and related improvements to corporate actions processing. In addition, auto-collateralisation across Europe will help in times of stress. With that in mind, we have developed a suite of new services to support clients' increased focus on liquidity management.

Above all, the most important aspect of T2S is harmonisation. Our clients will have fewer local settlement nuances to cope with. Operationally, each market will run on a common cycle, starting and ending at the same hour. We can simplify and centralise processing to drive down costs.

Of course, asset servicing will not be affected very much by T2S. Our local market expertise will continue to be essential.

In short, it is about striking the appropriate balance between centralisation and local market presence. If we get this right, T2S will have helped us shape a new, superior business model to support clients transacting across Europe.

**Is T2S sufficient or do you see the need for complementary initiatives to allow for offering a single gateway to and from Europe to the rest of the world?**

T2S does not really affect investment from Europe to the rest of the world, nor is it in itself a gateway to Europe. Rather, T2S makes it easier for custodians to provide a single gateway to European markets. T2S enables clients to appoint one provider in Europe. With T2S, custodians, like ourselves, that are strong throughout Europe are well positioned to provide this single gateway.

In Europe, many barriers to efficiency remain. The infrastructure is still seen as complicated and expensive – especially when compared with the US. For truly efficient capital markets, Europe needs many complementary initiatives. Some will come with the CSD Regulation, which clarifies the role of CSDs and brings uniform market discipline. Other improvements might follow once the Eurosystem has completed T2S and looks at other areas – perhaps clearing or cross-border shareholder identification.

When you think about the European post-trade landscape, it is hard to escape the conclusion that we simply have too many entities providing our infrastructure. Real and lasting progress will have to involve substantial consolidation, similar to what we have seen in the custody business. More changes are coming.

## Fernando Garcia Rojo, Head of Sales, BBVA Global Securities Services



Fernando Garcia Rojo

### **BBVA is expanding into markets with high growth potential (such as Latin America and Turkey). How will T2S support you in following this strategy?**

As you mention, BBVA is at the top of its leadership position in the Spanish market, is the largest financial institution in Mexico and has leading franchises in South America and the US Sunbelt. Additionally, it has a significant presence in Turkey through partnership with Garanti Bank, one of the largest banks in Turkey with BBVA as the leading shareholder. BBVA also operates an extensive branch network worldwide.

From our perspective, the expertise of local agents is increasingly in demand, as the local touch is a must-have for markets such as the Spanish one. The focus on value-added services, such as corporate action and tax reclaim services, will be “the name of the game” in the T2S environment. BBVA is well positioned to provide bespoke solutions in the post-T2S world, as a result of our continuous effort to implement innovative services for the new environment.

Our innovative post-trade services are provided “de facto” to markets such as Mexico, Turkey and the South American ones. It is fair to say that there are differences between these markets and the T2S ones. However, we perceive that these clients have common needs, in spite of their geographic demands, local expertise and tailor-made solutions. In this regard, our strategy is based on being a local partner for clients who want to use our post-trade services in these high growth potential markets, leveraging in our extensive footprint, while adding a regional approach to this local touch.

### **You consider technology as a key element in the transformation process in the financial sector. How relevant do you consider T2S in this regard and what could be the importance of this technological element at a more global level?**

From BBVA’s perspective, financial technology is a strategic element to differentiate us from our competitors, and key for building the best digital bank of the 21st century, which is the process we are focused on. Just to illustrate the importance we give to technology and the progress achieved in this field, let me share with you that BBVA technology platforms now manage up to 400 million transactions a day, compared to 90 million in 2006. In 2017 they will be prepared to manage one billion transactions a day in real time.

Let me highlight that this transformation process enables us to anticipate the impact that the technological revolution will have on the banking industry, as we see new competitors popping up in many segments of the banking value chain.

In this regard, T2S is “per se” a technological settlement platform essential for the digitalisation of the securities services processes. The post-trade area is based on high volumes, and T2S is a key element for increasing scalability on the settlement side, which is the core function of the platform.

On the other hand, it is important to say that T2S has been a stimulus for BBVA when going through our internal processes and programming their redesign. It has been a big challenge which involved our IT and business experts working together, as a well-oiled machine, towards transforming and reinforcing client services.

**What element other than technology was necessary for the success of the initiative and how do you see this element playing a role in similar regional integration of the T2S project around the globe?**

T2S will foster increasing competition and will lead to changes in the roles and business models of custodians and CSDs. All these forthcoming changes in the marketplace, and in particular to infrastructure, give BBVA the opportunity to increase the global service it offers to its clients.

On top of that, the progress on the harmonisation side, thanks to T2S, is extremely relevant. T2S is acting as a catalyst for harmonisation which is a factor that can play a definitive role in similar regional integration projects.



## Jesús Benito, CEO, Iberclear

### **Between joining T2S and remaining a purely national player or joining it and playing a more international role, what was the choice of Iberclear and why?**

I would say that Iberclear has chosen both aspects. On the one hand, we are very much focused on what our current client base will need from us once T2S is implemented in Spain. Iberclear has been strongly committed to these T2S preparations since the project was first announced in 2006. We committed contractually to T2S when we signed the Framework Agreement in June 2012 and we have been transparent in mapping our strategy for a T2S Europe since this time. We have allocated substantial resources to making these changes and are at an advanced stage in our substantial reform programme.

These reforms provide confirmation that Spain is fully committed to the harmonised securities processing environment that is enshrined in the CSD Regulation, a fundamental step towards the creation of an EU single market for securities services.

Besides this, we have fully embarked on a massive reform of the Spanish post-trade system. The clear objective is to align as much as possible our systems with European standards.

We believe that our current client base is our top priority as the domestic market is already composed of both Spanish as well as international players. Non-resident investment is very significant in Spanish securities markets. In fact, at the end of 2014 the participation of non-residents in the Spanish stock exchange reached a record high, at 43% of the market value, and they account for 82% of the total value of trading.

On the other hand, we are ready to play a significant role in bridging Europe and Latin America. We believe that the natural bridge between Latin American CSDs and T2S would be through Iberclear. We concentrate our international vision on playing this role in the future.

### **What are the initiatives that Iberclear has taken and what services have you developed to implement these initiatives?**

Up until now we have continued developing our range of value-added services. Working in partnership with Clearstream, Iberclear established REGIS-TR in 2010, a trade repository service for derivatives. Also, we have renewed our mandate to continue managing the National Registry for Greenhouse Gas Emission Allowances (RENADE) on behalf of the Spanish market, after winning a tender to continue its ongoing functions. In both cases, we view these as “valued-added” services that build upon the core settlement and notary functions that we have long provided as a CSD.

Together with Clearstream we also run a collateral management service intended to help users optimise their collateral.

However, we do not intend to take the opportunity, potentially offered by the CSD Regulation, to secure a banking licence and to offer commercial banking services in competition with our own CSD participants. This said, we will continue to develop our range of value-added services. As a CSD, we are confident that market participants recognise the value that we bring in delivering essential products and services, while maintaining a low-risk profile in order to minimise systemic risk.



Jesús Benito

As far as the future is concerned, we are talking with a number of key players in our market in order to develop a tailor-made solution both for the T2S environment and for the expansion of our services in Latin America.

**Do you think that T2S will create the opportunity for other local players, such as banks or CCPs, to become more international?**

Iberclear is fully committed to the new environment that the CSD Regulation and T2S imply for CSDs. The CSD Regulation is opening CSDs up to a level playing field in terms of competition. T2S is the tool to achieve it.

Together with T2S, the EMIR and the CSD Regulation are dramatically changing the European post-trade landscape. Nowadays, everybody is very much focused on the technical and operational changes that the relevant stakeholders in the T2S project have to implement. At this stage, they have not all thought through the strategic implications of when T2S is fully operational in 2017-8 and how they should re-configure their operational structures in order to take maximum advantage.

Any significant change is a mix between threats and opportunities. T2S is a great opportunity for any domestic actor to become international, in one way or another, since T2S will convert what is cross-border today into the equivalent of domestic settlement.

## Richard Dzina, Executive Vice President and Wholesale Product Director, Federal Reserve Bank of New York



Richard Dzina

### **The Federal Reserve System runs the Fedwire Securities Service settlement platform. Why is it of interest to you to regularly exchange experiences with your counterparts from the European Central Bank (ECB)?**

Frequent interaction with other entities that operate peer services has provided many benefits over the years, and the importance of these relationships is only expected to grow. For example, learning about our ECB colleagues' experiences with T2S has benefited the Federal Reserve System as we modernise the Fedwire Funds Service and Fedwire Securities Service and contemplate post-modernisation visions for these platforms. As the ECB has preceded us in this journey, understanding what actually has (or has not) worked has helped us create and execute better plans. Beyond this tangible value, perhaps the greatest benefit is relational. Having partners who we can reach out to for guidance, and with whom we can exchange ideas, can only strengthen the way we run our businesses.

### **How does this collaboration affect your work on the Fedwire Securities Service?**

Discussions with the ECB on T2S have already inspired the Fedwire Securities Service to consider a number of new ideas. For example, encouraged by the T2S approach, we are taking a fresh look at data services as a value proposition for customers and as a prospective new revenue stream. We have also valued our consultations with the ECB on the T2S pricing framework, the product development process, and common security and resiliency imperatives for financial market infrastructures.

### **How do you see the collaboration between providers of financial market infrastructure services developing globally in the near future?**

Financial markets are becoming increasingly global, with profound implications for financial market infrastructures. For example, there is increasing demand upon market participants to optimise the management of collateral across borders, in response to regulatory and cost pressure. Moreover, global settlement cycles are generally getting shorter to reduce credit and liquidity risks, and to reduce capital costs for collateralising unsettled exposures. Reflecting these trends, financial market infrastructures are likely to come under pressure to support greater connectivity across markets, potentially to include expanded operating hours that span jurisdictions or to consider new cross-border access arrangements. Many large financial institutions that rely on the Fedwire Securities Service run global businesses. It is essential that we understand and respond to the evolving needs of our customers. Collaboration between financial market infrastructures can help us to ensure that the services provided are effective, reliable, safe and efficient. We have common interests across each sphere.

## Tony Freeman, Executive Director Government Relations / Industry Relations, DTCC Europe



Tony Freeman

**DTCC, the Depository Trust & Clearing Corporation, strives for new ways to increase transparency and reduce costs and risks through operational efficiency, standardisation and mutualisation of processes – features that T2S shares. Do you see a global tendency towards the use of a somehow standardised model for the clearing and settlement of securities?**

DTCC is an industry-owned holding company that, through its various operating subsidiaries, provides the largest post-trade market infrastructure for the global financial services industry. DTCC is working closely with clients and market participants on several key initiatives that aim to improve operational efficiency and reduce systemic risk.

Many DTCC clients invest across borders, and it is increasingly clear that the demand for local, regional and global harmonisation continues to grow. However, what is achievable is nuanced — from both a segment and geographical perspective — and the expectations of end-users and policy-makers are sometimes unrealistic within specified timeframes.

T2S will significantly improve the level of harmonisation in Europe, leading to expectations that costs will fall sharply, perhaps to the levels already achieved in the United States. Europe has a GDP comparable to that of the US, but it essentially remains a very fragmented market. T2S can harmonise settlement processes but it cannot address the remaining differentiating factors such as legal systems, fiscal rules and corporate regulations. In Europe, asset servicing also adds cost and complexity. Despite a lot of work to produce standardised data models and processes, adopted on a voluntary basis, many observers still feel that a large amount of excess cost and risk still exists.

DTCC is an enthusiastic participant in global standardisation forums such as CPMI-IOSCO and FSB. The recent track record of national and regional regulators indicates that cooperation does not naturally occur. A current example exists in the trade repository area where global coordination is lacking, global data standards do not exist, and national legal barriers hinder cross-border cooperation. Equivalence designations are also highly relevant. CPMI-IOSCO and FSB can address these issues by developing technical standards that can be adopted, and where appropriate mandated, by national regulators.

DTCC has been active in areas such as standardised corporate actions processing, adopting ISO 20022 and also in facilitating trade reporting with LEI (Legal Entity Identifier) codes. While we are a long way off from a wholly standardised model, we expect significant progress to be made where there is true industry demand or, crucially, a regulatory mandate.

### **Will T2S change the ways in which DTCC can access Europe? If so, how?**

T2S is clearly a significant event in European settlement. Alongside the CSD Regulation, it promises to significantly change the settlement landscape – affecting all players. DTCC is actively looking at potential areas of opportunity around T2S.



**DTCC is leading an industry-wide discussion to shorten the trade settlement cycle. Do you think it would require stronger cooperation between settlement platforms all over the world? What would the role of T2S be?**

In the US, DTCC is acting as sponsor and project manager for the industry discussion about a move to a shortened settlement cycle of T+2. The steering committee and working groups are chaired by industry representatives, and more than 600 people from a wide cross-section of firms have participated in the process so far.

There is a global trend towards shorter settlement cycles, with Asia in the vanguard. About half of Asian markets already have a T+2 cycle and several others will move from three to two days over the next 18 months. After at least three years of debate, the 28 Member States of the European Union also adopted T+2 in October 2014. At first glance, it is tempting to think the US is simply going through the same process as the rest of the world – but there are important stylistic differences. The primary drivers for T+2 in Europe were facilitating efficiency within T2S and, importantly, harmonisation within the EU's Single Market. In Asia, with its modern technology and fewer legacy processes, efficiency is the key. In the US, while the benefits of global harmonisation are acknowledged, reduced risk and cost are the key issues that justify a move to T+2.

An additional factor affecting the US is the industry's regulatory structure. While the US has a largely harmonised regime for legal systems, fiscal rules and corporate regulations, it does not have a unified regulatory structure. A recent letter from the T+2 Steering Committee sent to the US Securities and Exchange Commission was copied to an additional seven infrastructure providers and regulators – all of whom have regulations affected by a move to T+2.

By contrast in the EU, the CSD Regulation, initiated by the European Commission and finalised by the European Securities and Markets Authority, mandated T+2 across Europe. Likewise, most Asian nations have a single regulator. So, both in Europe and Asia, the regulatory change process was not overly complicated. The situation in the US is quite different, and the justifications and tactics for achieving T+2 differ – perhaps far more than most observers would expect.

It is clear that a global move to T+2 is ongoing. In Japan, an industry committee has recently been formed to formally look at a move to a two-day cycle – with a very similar structure to the US model. In Canada, the Canadian Capital Markets Association has recently been revived to look at a T+2 cycle. CSDs do talk to each other, and while there is no formal global commitment to T+2, there is momentum. The US is targeting Q3/2017 for implementation of T+2, and it is possible that a similar timetable can be adopted – informally – around the world by settlement platforms, with a two-day cycle to become the global standard.

## Richard Scavetta, T2S Program Director, Citi

**With T2S the settlement of European securities will become more efficient. Will this be enough to offer a single gateway and make Europe more attractive to your international clients?**

European financial markets have been transacting in euro for more than 15 years now, but beyond a shared currency, each market is largely localised in the way it is structured. That dynamic changes with T2S, which is poised to deliver much-needed harmonisation to the post-trade space in Europe, making it more operationally efficient, which ultimately should attract more investment. Citi, with its unique global footprint, leverages its direct connection to T2S to deliver seamless access to European markets to our clients around the globe.

**T2S is an initiative introduced by the European Central Bank for the European CSDs. Does this mean that the benefits of T2S will be limited to Europe or would you also see some benefits beyond the European border?**

The benefits of T2S will initially start in Europe, although participants in European capital markets from other regions will benefit from the newly harmonised post-trade process. As T2S becomes more widely adopted throughout Europe, it is not inconceivable that other markets might look to adopt a similar approach for their post-trading environment.

**How likely or desirable is it in your view that T2S will expand beyond its current geographical coverage?**

As T2S rolls out across European markets, and early participants are benefitting from an increasingly efficient post-trade operational environment, it makes sense that other markets may follow suit. There are markets that are likely to consider joining, such as those that share the single currency but have opted not to implement in the first phase. Beyond those, the next wave of participants may be to the north and east of the region.



Richard Scavetta

## Jorge Hernán Jaramillo Ossa, President, Deceval

**The Latin American Integrated Market (Mercado Integrado Latinoamericano, MILA) is a collaborative initiative of the stock exchanges of Chile, Colombia, Peru and Mexico as well as the respective CSDs Deceval, DCV, Cavali and Indeval. Do participants of MILA aim to establish a common settlement platform to make securities settlement more efficient and further integrate the markets?**

This can be seen as a goal and a need for the medium term in the MILA countries and institutions. We have to consider this objective to address payments, liquidity risk, foreign exchange transactions and counterparty risk. The volumes and depth of the MILA market are low due to barriers similar to those identified in the European financial market integration project.

“MILA” and the “Pacific Alliance”, a project for the financial and capital markets integration in four of the most important countries in the Latin America region, aimed for the holistic approach pursued by the European countries, but vigorously addressing the most important barriers and challenges the Americas face. “MILA” represents the integration of the financial and capital markets of Colombia, Mexico, Peru and Chile, promoted by the private sector and supported by the financial supervisors and regulators of the countries involved, while the “Pacific Alliance” was promoted by the governments of these same countries, aiming for the creation of a trade zone involving free circulation of labour, capital, trade and commerce, working especially in the following areas: market access (trade liberalisation) and rules of origin, trade facilitation and customs cooperation, elimination of technical obstacles to trade, investment, public procurement, and trade in services. Just as importantly, the four countries have in common stable democratic governments, good macroeconomic policies and a similar pro-market orientation, as well as a common interest in deepening economic ties with their counterparts in the Asia-Pacific region.

The “MILA” market, as of July 2015, has a market capitalisation of USD 874 billion, and the value traded since it was created adds up to USD 343.1 million. The number of issuers listed in the four linked exchanges is 742. We have linked the trading platforms of the stock exchanges, permitting the intermediaries of each country to operate directly in the trading systems of the issuer markets, using a securities orders routing system from the investor market to the issuer market.

MILA and the “Pacific Alliance” market (comprising Chile, Colombia, Mexico and Peru) have a total population of 216 million and an aggregate gross domestic product (GDP) of USD 2.02 trillion, representing 35% of total Latin American GDP (and 45% of total Latin American imports). MILA will become the seventh-largest market on earth in terms of GDP, equivalent to that of the state of California or the Great Lakes states combined.

### **How has this cooperation helped to foster investment in the participating countries?**

It certainly has helped. As of July 2015, trading in MILA since it was created adds up to USD 343.1 million. A positive externality derived from the MILA market is the related direct investment carried out in many sectors of our economies. Sectors like banking, brokerage houses, mining, oil and gas, communications and retail are examples of capital flows between the markets.



Jorge Hernán Jaramillo Ossa

MILA is a platform for greater visibility of the individual markets. MILA has been consolidated as a vehicle for information and has fostered better participation from investors. The Pacific Alliance project and MILA strategy will help the growth of our markets in the future.

In the coming months, new instruments will be listed in the MILA market. Debt securities and exchange-traded funds (ETFs) will be part of the product offering. Also, an issuer making an IPO in one of the MILA countries will have the opportunity to make the offer in the other MILA market countries at the same time. This will help to develop more liquidity and more cross-border flows.

We have many barriers to deal with, but we have the support of the Pacific Alliance governments, as well as regulators and supervisors.

**In your view, what would cooperation between T2S and your own initiative look like?**

Let me first say that T2S and the approach to financial and capital markets integration in Europe is one of the most important projects in the global financial industry. T2S is an active project that undertook the creation of a single platform for the settlement of European securities transactions under the DvP principle using central bank funds, transforming cross-border securities settlement. The project involved substantial market transformations, vast regulatory changes and enormous industry participant effort to achieve a harmonised and commoditised securities settlement system.

The comprehensive approach to delivery was a driver for business changes in most of the financial infrastructures in Europe, as well as for most market participants where competitive issues, innovation, business development and impact analysis were put to the test. Changes in the way business is performed must permit the market participants to buy, sell and lend European securities within the various markets as they would in local ones. The harmonisation required in achieving such a market status led to the need to overcome the most significant barriers to financial market integration. T2S is dealing with at least six of the identified Giovannini barriers, namely the removal of: restrictions resulting from national differences in information technology and interfaces, national clearing and settlement restrictions that require the use of multiple systems, differences in national rules related to corporate actions, beneficial ownership and custody, absence of intraday settlement finality, practical impediments to remote access to national clearing and settlement systems, and national differences in operating hours/settlement deadlines.

Another fundamental settlement and post-trade framework changed because of the introduction of T2S was the new CSD Regulation, which in turn will help to remove the following Giovannini barriers: differences in national rules related to corporate actions and beneficial ownership and custody, absence of intraday settlement finality, national differences in settlement periods, national differences in securities issuance practices, and national restrictions on the location of securities. One of the most significant challenges has been the migration to a T+2 settlement cycle.

The transformation derived from the removal of the barriers to market integration aimed to create a settlement process whereby cross-border securities transactions are settled in an identical way to those in the domestic markets. This can only be achieved with a harmonised set of rules, cost basis and process efficiency. Transactions will settle using DvP, in central bank funds by means of real-time



gross settlement (RTGS), fulfilling the most important of the IOSCO and BIS Principles for financial market infrastructures. The foundation and principal value propositions of T2S are: to promote competition in the euro area, to achieve major cost reductions for cross-border settlement, the mitigation of counterparty risk through the use of DvP settlement in central bank funds, immediate finality, and multicurrency capabilities.

MILA and the Pacific Alliance initiatives to integrate the markets of the four Latin American countries face the same challenges addressed by Giovannini for the financial integration of the euro area and the T2S project. The creation of a value-added network provided by MILA (one-stop shopping) so that securities listed in the four markets can be traded and to provide securities settlement within the MILA region has represented a tremendous effort to link the markets and their financial infrastructures. The MILA market represents the linked and consolidated securities market of the four countries in one, as well as the CSD to CSD links to settle the transactions. In that sense the MILA market has not yet considered a common platform for cross-border securities settlement.

The major barriers to be overcome do not differ materially from those addressed by the euro area as defined in the Giovannini Report, and worked on by T2S and the CSD Regulation, but have the additional complexity of multiple currencies, multiple capital market regulations (very different from the centralised approach followed by the European Union), and a lack of harmonisation in the most important practices related to: issuer and intermediary recognition, settlement models and periods, access to markets and payment systems, access to central bank funds settlement, rules related to corporate actions and beneficial ownership, tax regulation, recognition of double taxation treaties for eligible securities in investments, accounting practices, dematerialisation rules, investor rights protection, counterparty risk due to prefunding of transactions in the issuer market, and lack of DvP settlement between markets. These are the topics we need to work on most diligently.

To remove these barriers, we have worked closely with regulators and financial supervisors. Initiatives such as MiFID in the European case for the recognition of issuers, and the securities passport, have been adopted in MILA markets, but we are far from the final objective. Memorandums of understanding between private institutions and governmental institutions were put in place to support market development. The agenda for financial integration is being supported by the Presidents of the four countries and constitutes a major challenge for the coming years.

## Yoshinobu Takeuchi, Honorary Chairman of JASDEC



Yoshinobu Takeuchi

### **From a business perspective, is there an interest to make Japanese assets available to European investors?**

In the Japanese equities market, non-residents have an extremely high presence. Foreign investors now account for around 50% of equity transactions, and more than 60% of these foreign investors are from Europe. This means that European investors have a high presence in Japan.

Although JASDEC provides settlement and administration services mainly for securities issued in Japan, JASDEC has introduced a number of functionalities to increase convenience for foreign investors, including ISO 20022 and SWIFTNet. We hope this kind of increased functionality will continue to facilitate cross-border transactions.

T2S revolutionises cross-border transactions within the euro area, and the resulting integration and vitalisation of the European market should support investment in Japan. Conversely, we can also expect Japanese investors in Europe to enjoy the merits of T2S that arise from more efficient use of capital, lower cross-border settlement costs and suchlike.

### **JASDEC has cooperation agreements with most Asian CSDs. What type of connection do you currently have with Europe?**

JASDEC has formed MOUs (memorandums of understanding) to exchange information and cooperate with 18 institutions, principally CSDs in the Asia region, and is conducting a range of activities based on these MOUs. Concrete examples of these activities include personnel development programmes that involve periodic exchanges and joint training, and measures to support emerging markets by explaining the Japanese market and demonstrating advanced functions provided by JASDEC. However, these MOUs do not incorporate any business alliances. Within Asia, there are large differences in the circumstances of each market, with different structures, regulations, currencies, market practices, market participants and investors. The MOUs are therefore aimed at promoting mutual exchange and supporting the development of markets in ways that reflect actual market circumstances.

Although we do not have many MOUs with European CSDs, we regularly exchange information with the European Central Securities Depositories Association (ECSDA) through the World Forum of CSDs to deepen our understanding of the newest approaches in Europe. We also have a close connection to Europe on the business side. European ICSDs and financial institutions act as Indirect Account Management Institutions for JASDEC, used by European investors to access the Japanese securities market. In a similar way, JASDEC has issuer CSD capabilities allowing foreign issuing entities, including those from Europe, to issue yen-denominated foreign bonds (samurai bonds) in the Japanese securities market. We also hope T2S will represent a chance to create new activity in our business relationship with Europe.

### **How could T2S change or even facilitate connecting with Europe?**

Emerging markets in Asia are in need of an extensive amount of funding to develop their economies, and capturing foreign investment holds the key to this growth. Initially, the main channel for this kind of financing was indirect financing

centred around bank loans, but together with the development of securities markets, increasing investment by non-residents has also become an important factor in the capital markets field. To increase investment by non-residents, a safe and effective securities settlement system needs to be created in addition to opening up the market. In the medium to long term, T2S should become a great stimulus towards systematic reform and a move towards effectiveness in the securities settlement sphere in Asian markets.

For example, we are currently beginning to see movements towards partnerships between markets in Asia, such as ASEAN Trading Link and Shanghai-Hong Kong Stock Connect. However, when it comes to post-trade processing, these programmes currently prioritise the maintenance of current systems. Furthermore, Asia cannot support a common market or currency in the same way as Europe due to large differences between markets, making it hard to introduce a scheme exactly the same as T2S. However, with a new cross-border cooperative framework under discussion, including discussions on the ABMI (Asian Bond Markets Initiative), which apexes the meetings between the ASEAN+3<sup>2</sup> finance ministers and central bank governors, we can expect new ideas to emerge concerning cross-border settlement realisation that fit with current conditions in Asia. The T2S experience will become an important reference point for Asia.

<sup>2</sup> The ASEAN+3 is composed of 14 economies. These include ten ASEAN countries (Brunei Darussalam, Indonesia, Cambodia, Lao People's Democratic Republic, Myanmar, Malaysia, the Philippines, Singapore, Thailand and Viet Nam) plus three other countries (the People's Republic of China, Japan, Republic of Korea) and Hong Kong (China).

## Taiji Inui, ADB Consultant for ASEAN+3 Bond Market Forum Sub-forum2 (ABMF SF2) and Cross-border Settlement Infrastructure Forum (CSIF), Senior Manager, NTT DATA Corporation



Taiji Inui

**To further integrate the ASEAN+3 region, you opted, as a first step, to establish links between the different CSDs and central banks (and not to move to a platform solution like T2S). What was the reason behind this decision?**

Cross-border straight-through processing (STP) between CSDs and central banks is very limited in ASEAN+3, which is one of the main reasons why cross-border bond trade and settlement is inefficient (and more expensive). However, there is significant demand for more efficient cross-border bond settlement infrastructures, including from a variety of initiatives supporting economic development, such as the Association of Southeast Asian Nations (ASEAN) Economic Community. The global trend of tightening regulation has also had some impact in the region, increasing the demand for the use of bonds in one country/economy as collateral to obtain local currencies in other countries/economies. Therefore, linking fragmented market infrastructures is regarded as one of the most important solutions to address the current challenges. However, broader differences in a variety of issues (such as the level of development, currency used and political situation) exist in ASEAN+3 compared with those in Europe and North America. With this in mind, CSDs and central banks in the region set up the Cross-border Settlement Infrastructure Forum (CSIF). The forum has discussed how to address the challenges faced in the region and how to enable cross-border STP. It reached consensus on the following principles:

- (i) existing cash and bond settlement infrastructures should be used to the maximum extent possible;
- (ii) central bank money should be used for cash settlement;
- (iii) newcomers should be allowed to join when the market is reasonably developed and ready;
- (iv) infrastructure should be constructed in a way that allows local financial institutions to benefit;
- (v) bilateral links should be the starting point, then the possibility of centralised integration should be explored as a long-term goal;
- (vi) consistency and collaboration with other initiatives in the region should be continued to unleash further benefits;
- (vii) market practices and technical aspects should be standardised among members as much as possible to minimise costs; and
- (viii) as far as is practicable, rules and regulations which hinder cross-border transactions should be harmonised.

In line with these principles, and as a short to medium-term solution, it was decided to link CSD and RTGS systems bilaterally, when each market infrastructure becomes ready to be connected. International standards (such as ISO 20022, BIC and ISIN) have been adopted in order to connect the systems via a standardised interface (gateway). An integrated solution, i.e. a hub providing functions such as network management and monitoring, could be an issue for the future. Planning a platform solution like T2S as a settlement hub for capital markets could, therefore, be a long-term goal.

**To what extent can you use the T2S experience to further develop your own initiative?**

Europe's successful development of T2S provides one of the best models of efficient and effective market infrastructure in our history. Europe began by

interlinking RTGS systems in TARGET. Once TARGET was stable and the volume of transactions had increased, a more efficient single shared platform, TARGET2, was developed. Now, further development is underway, and T2S acts as a settlement hub for CSDs in the region, providing auto-collateralisation (simultaneous delivery versus payment (DVP)) using central bank money. This proven roadmap will definitely contribute to the development of market infrastructure in other regions, including ASEAN+3, even though the level of market development differs by country and by economy, and there is no single currency or common market practice.

A further positive result of the development of T2S is standardisation. More specifically, the ECB drove forward the standardisation of payment processes and messages, as well as information technologies (such as ISO 20022 and XML), which may be applicable in other regions, including in ASEAN+3, to ensure interoperability between market infrastructures. The development of T2S also clarified and standardised definitions and terminology related to payment and settlement systems. Standard messages developed in ASEAN+3 may also contribute to increasing interoperability in other regions, Europe included.

**How likely do you think it is that links will be established between T2S and existing, or future, settlement infrastructure in your region?**

Securing interoperability based on international standards is one of the most important issues for market infrastructures confronted with globalisation. The demand for cross-border financial transactions (securities settlement) is increasing in ASEAN+3. Linking the market infrastructures in ASEAN+3 with those in Europe would be a realistic initiative, once operating hours have been extended to cover the time difference between the regions.

Considering that ASEAN+3 markets are growing drastically, some market infrastructures in the region will be ready to be connected to each other, not only within the region but also globally, in particular with market infrastructures in Europe. ICSDs and global custodians in other regions have already connected with some CSD and RTGS systems in ASEAN+3. We need to admit that demand for the euro and the US dollar is high. TARGET2 and T2S could potentially be directly connected with CSD and RTGS systems in ASEAN+3.

Owners and operators of CSD and RTGS systems may need to consider this globalisation of the markets. Indeed, we will face demands to harmonise and standardise payment processes and messages in regions such as ASEAN+3 and Europe, and across the regions. Establishing an international framework based on current international or regional frameworks which addresses the interoperability of market infrastructures from a wider perspective may be useful for developing, implementing and promoting harmonisation and standardisation of payment and settlement systems, including global networks.

The long-term goals for market infrastructures in ASEAN+3 is:

- (i) deeper and more liquid bond markets in ASEAN+3;
- (ii) government debt in each country/economy to be the people's asset in ASEAN+3; and
- (iii) interoperability of CSD-RTGS links, not only within ASEAN+3 but also with other regions (note: measures to protect each market, including capital and cash controls, need to remain at the discretion of authorities in each market).



## Lum Yong Teng, Head of Depository Services, SGX



Lum Yong Teng

### **Singapore is one of the world's leading financial centres. Could you tell us about your role as one important gate to the Asian markets?**

Singapore Exchange (SGX) is an integral part of Singapore, a leading international financial centre which also serves as a hub for Southeast Asia. SGX is therefore well placed to serve the fast-growing markets across Asia-Pacific. We offer a fully integrated value chain of services, from trading and clearing to settlement and depository services for the securities market; this chain brings together companies that want to grow and investors who want to be a part of Asian opportunities.

SGX fulfils a unique role bringing together companies and investors, connecting global capital with firms looking to grow across Asia. We have 770 listed companies with a total market capitalisation of S\$1 trillion. SGX is the world's best connected exchange with 40% of listed companies originating from outside of Singapore, 90% of listed bonds from abroad, and linkages with exchanges from ASEAN, Australia, Hong Kong and Europe. More than 75% of our member firms are international firms.

We have offices in five countries across Asia and Europe to better serve customers and effectively deliver our products and services. This helps promote a closer working relationship with key stakeholders and ensures good ground support to customers, IPO professionals and market intermediaries.

SGX's value to issuers is to offer faster time to market through the adoption of a market-oriented regulatory framework. This is achieved, for example, through an efficient and streamlined listings application process. We also offer a full suite of post-listing corporate services to companies, ranging from disseminating corporate announcements to distributing corporate entitlements.

SGX is committed to operating a fair, orderly and transparent market and has in place a robust regulatory framework and corporate disclosure requirements to safeguard the interests of investors. As an integrated exchange, we operate a clearing house and depository which aims to protect investors from brokers' default or insolvency, and from the risk of fraud.

### **In your view, how is T2S changing the way of accessing Europe?**

T2S will harmonise post-trade processes and reshape the complex and fragmented financial market infrastructure in Europe. With the introduction of a single securities settlement platform, T2S offers market participants centralised delivery-versus-payment (DvP) settlement in central bank money across all European securities markets. Market participants can gain access to multiple markets through participating central securities depositories by becoming directly connected parties or indirectly connected parties.

T2S has the economies of scale to reduce the cost of securities settlement for domestic and, in particular, cross-border transactions in Europe. With the harmonisation of market practices and settlement procedures, CSDs and market participants can also streamline back office operations and achieve greater operational efficiency through process automation and straight-through processing.

This will benefit market participants directly and investors could also potentially enjoy lower costs passed down by the market participants.

On top of lowering settlement costs, settlement risk on cross-border transactions will also be reduced with centralised DvP settlement in central bank money across all European securities markets. The use of central bank funds eliminates the counterparty risk of default associated with commercial bank money. It will significantly reduce systemic risk and improve market resiliency.

T2S also promotes optimal collateral utilisation and efficient liquidity management. Currently investors and market participants with outstanding positions in different markets usually need to maintain excess collateral and liquidity as a precautionary measure in case of being short in that market. T2S will provide the opportunity to pool the collateral and liquidity as a single buffer when settling in several European markets. This will help banks and intermediaries to manage their collateral much more efficiently, optimise their funding costs and avoid failed deliveries. As a consequence, it will also lead to less costly access to securities in EU countries.

**Would you expect the integration of financial market infrastructure to take a global dimension in the foreseeable future?**

Integrating the financial market infrastructure in Europe has been approached by creating a single capital market and the use of a single currency, the euro. The European Union has made tremendous efforts to harmonise legislative and regulatory frameworks, remove national barriers to financial integration, support cross-border access and competition, and foster cross-border financial transactions.

The provision of a single post-trade settlement platform by T2S will further cement the integration of the financial market infrastructure in Europe.

At a global level, the integration of financial market infrastructure is also expected, although not necessarily through the adoption of the EU model. In Asia, financial markets are at various stages of development. The challenges involved in harmonising regulatory frameworks and introducing a common currency are many. Given the diversity of Asian financial markets in aspects including economic structure, size and degree of openness, a more flexible approach is required.

The integration of financial market infrastructure globally will not take place overnight; it is a journey and will take time. Global financial market integration may not take the form of the creation of a single marketplace, but the convergence of international market standards and practices is likely.

The establishment of the Principles for financial market infrastructures (PFMIs) by the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) is seen as the new order for all financial market infrastructures. SGX itself was assessed as highly compliant with the PFMIs by the IMF last year, making us among the first to achieve this. The adoption of the PFMIs by financial market infrastructures progressively brings about the convergence of capital market standards and practices, and adds impetus to market integration globally.

## Giorgi Laliashvili, Head of Financial Markets Department, National Bank of Georgia



Giorgi Laliashvili

### **Could you tell us how your post-trade market is currently organised and what the experience of a project like T2S could bring to you?**

At the moment, there are two CSDs on the market. The first one is operated by a central bank and it handles government and central bank securities. The second CSD is a commercial one owned by the Georgian Stock Exchange, where corporate papers and equities settle. The central bank also operates a securities settlement system, which is a component of the Georgian payment system alongside RTGS. The two systems have operated on the same integrated platform since 2010 and allow for the full automation of key processes, ensure automated delivery-versus-payment (DvP) settlement and are integrated with the trading platform. Trading is almost entirely based on Bloomberg and settlements solutions are provided by Montran Corp, both leading global players in their respective areas. This set up ensures quick and convenient settlement of both primary and secondary market trades. The entire trade and settlement cycle may be finished in a matter of minutes, if such necessity arises.

The infrastructure for corporate papers, on the other hand, has not been upgraded for some time and lacks similar features. Interested parties are currently exploring the idea to consolidate entire post-trade infrastructure in one place. The commercial CSD would become a participant in the National Bank of Georgia securities settlement system and would register and settle securities there. All other profit-generating functions, including corporate actions, tax and legal services, collateral management and securities lending, would remain with the CSD. As a result, the entire market would benefit from the modern infrastructure already in place at the central bank, successfully used for the government securities market. Notably, the proposed set up is largely inspired by the T2S project.

We will replicate a similar approach, albeit on a much smaller scale, where multiple CSDs use a single settlement system operated by a central bank. With T2S, the European Central Bank (ECB) sets an important precedent, in contrast to an earlier prevailing trend of moving post-trade infrastructure to the private sector. That said, we look forward to cooperating with the ECB and learning about their experience with the new system, already a few months in production.

### **In more general terms, what benefits do you see for multiple CSDs to share a common platform?**

For a small economy with an emerging capital market, it may not be efficient to operate multiple settlement platforms. While market turnover remains relatively low, it will not generate enough profit to justify large capital investments into software and hardware. Sound business continuity policies require a costly back-up infrastructure.

It is also difficult to hire and retain highly qualified staff, while offering them attractive remuneration, in a competitive financial market environment. Either you compromise on quality of one or all of the above mentioned components, or you try to keep safekeeping and settlement fees high to cover the costs. In the first case, you end up with inferior infrastructure and, in the latter, you create an unnecessary barrier for market development by raising transaction costs. Hence, we think it is a good solution to bring all securities under one platform, which is operated by a central bank. Such a platform will be backed by the strong balance sheet and reliable IT

infrastructure which a central bank has to maintain anyway, due to the nature of its operations. As a result, we benefit from good synergies and increased efficiency.

As securities settlement becomes increasingly important and we observe the increasing use of collateral in financial transactions, entire financial system stability will rely on the uninterrupted functioning of related settlement infrastructure. Hence, it is very rational to entrust an institution like a central bank, responsible for the smooth functioning of payment systems and financial stability in a broader sense, to be in charge of such a systemically important platform. At the same time, a central bank would refrain from engaging in commercial activities which entail financial and legal risks. Therefore, leaving all but settlement services under the commercial CSD's competence is the only right solution from a strategic viewpoint.

**What role do efficient financial market infrastructures play in the national and regional economy, in your view?**

They create a backbone of successful capital markets. They are a necessary precondition to market development. In our experience, any market segment lacking modern infrastructure struggles and lacks stamina. The introduction of modern infrastructure has led to the rapid growth of the government securities market in the past five years or so. Here, under infrastructure, we mean not only the IT component, but clear and sound legal basis, rules and regulations, including simple and non-discriminatory taxation.

For a small market, regional outreach is essential for exploiting economies of scale that bigger markets can achieve within their own country alone. That is why Georgia aspires to be a regional financial hub, and good infrastructure is a key to this aspiration. It grants non-resident investors, financial intermediaries and CSDs a secure and comfortable entry to, or exit from, the market and helps them in providing access to the Georgian market to their clients abroad. In addition, local companies often offer alternative channels for entering other markets in the region. In general, Georgia's policy is very much outward facing, with liberal approaches to capital mobility and non-resident participation, be it a financial market or other segments of the economy. We are proud of the fact that resident and non-resident investors enjoy similar treatment. That said, having a settlement model which is familiar to most of the investors and market infrastructures, because it shares the same principles which T2S rests on, adds yet one more building block to an environment conducive to the global integration of the Georgian economy.

In the past few years, the Georgian payment system project was a good model for other smaller countries worldwide. A dozen of them have studied our infrastructure and successful implementation practice. They will, for sure, be interested in the future path we choose for developing our post-trade infrastructure. Should we succeed, this is going to be a good argument in favour of the T2S model for smaller economies.

## Monica Singer, CEO of Strate (PTY) Ltd

**Strate, the CSD in South Africa, is engaged in some initiatives with CSDs in T2S. Could you tell us more about these initiatives and how important it is for you to have access to T2S?**

Since its inception over 16 years ago, Strate has positioned itself and has been internationally recognised as a world-class CSD. We have consistently adopted industry-appropriate global best practices and aligned ourselves with international standards, including most recently the CPSS-IOSCO Principles for financial market infrastructures. It is against this backdrop that we have been able to build a number of key strategic partnerships with CSDs around the world who operate at the same level.

Strate has therefore been engaging, and has built partnerships, with many CSDs in the T2S environment over the years. This currently, however, only relates to services that initially involve the processing of settlements, certain collateral management services and corporate event processing in the South African market.

The current discussions, therefore, have no impact on T2S.

**Strate has been facilitating workshops in African countries on the CPSS-IOSCO Principles for financial market infrastructures. Is an interest for cross-border integration developing in Africa? If so, what is the current status?**

Given that Strate is one of South Africa's financial market infrastructures, it voluntarily completed a self-assessment shortly after the principles and the assessment methodology were published by CPSS-IOSCO. Strate was one of the first organisations to adopt the Principles and it is therefore able to share its insights and experiences with organisations in other countries in Africa and abroad. It works closely with the World Bank, the IMF, the World Forum of CSDs and regional CSD associations to promote and participate in workshops that educate countries about the Principles.

In relation to cross-border integration, the regional attendees at these workshops have expressed an interest in a measure of cross-border integration.

The African continent comprises a number of distinct regions (each comprising multiple independent, sovereign, countries) and a great deal of importance has been placed on the establishment of CSD infrastructures in each of these countries.

From an integration perspective, a number of different models have been (or are in the process of being) developed:

- in the case of the West African Economic and Monetary Union (WAEMU or UEMOA), a working model for cross-border integration already exists;
- in the case of the East African block (comprising countries such as Kenya, Tanzania, Uganda and Rwanda), a different approach has been adopted and is currently under development; and
- from a Southern African Development Community (SADC) perspective, the fifteen member states are currently involved in a regional payments project to enable macro-regional integration. This project is undertaken in terms of the



Monica Singer



SADC Finance and Investment Protocol. The Committee of Central Bank Governors (CCBG) has been mandated under this protocol to develop and integrate the SADC Financial Markets.

One of the components within the overall SADC payments project is the development of a regional cross-border securities settlement model.

The SADC Banking Association, in conjunction with key financial market specialists, developed a DvP model as well as the appropriate rules and standards which align with the recommended CPSS-IOSCO guidelines. This model was approved by the CCBG as the solution to be adopted within SADC and is aimed at benefitting the SADC countries by enabling them to operate within their own legal frameworks and maintain their sovereignty rights.

Although the WAEMU does make use of a single currency (the West African CFA franc), we are not aware of any initiative that could result in a single currency across the continent.

**If an interest for cross-border integration became more substantial, could a single settlement platform like T2S be used as a model? If not, what other options would you consider more appropriate and why?**

There does not appear to be any appetite for an African equivalent of T2S.

The absence of a harmonised legal structure and a common currency, and the fiercely protected sovereignty of each nation, has resulted in cross-border integration through interoperability, where each CSD in each country performs the settlement of transactions in their stock exchange and the links between the various CSDs are built only to transfer securities or cash across borders.

## Attila Szalay-Berzeviczy, Executive Director, Head of Group Securities Services, Raiffeisen Bank International AG



Attila Szalay-Berzeviczy

**Raiffeisen Group Securities Services operates on the border between the T2S countries in western Europe and the non-T2S countries in central and eastern Europe. Is that a source of complexity or does it create new business opportunities?**

Raiffeisen Bank International (RBI), as a leading sub and global custodian bank in the central and eastern European region, covers 18 markets. Three of these markets (Austria, Slovakia and Slovenia) have introduced the euro; the others either are not anticipating to do so within the next five to ten years (Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania), or will not do so because they are not members of the European Union (Albania, Belarus, Bosnia and Herzegovina, Kazakhstan, Macedonia, Montenegro, Serbia, Russia, Ukraine). However, the direct impact of T2S on our business is currently limited to Austria. Having said that, RBI likes to shape the market and be ahead of the curve, rather than just follow the trend. Therefore, the bank decided to roll out a securities services strategy which takes into consideration the long-term effects of T2S.

As a result, we chose to position Austria in our service offering as a gateway to central and eastern Europe. This means that we have set up a securities services operation centre in Vienna and linked it up directly with the CSDs of the central and eastern European countries. In this way, those clients who choose to come to the Austrian market directly and maintain cash and securities accounts with RBI will have easy, low-risk and cost-efficient access to the rest of our markets. As we are the only bank in this part of the world taking this approach, it is fair to say that T2S has provided the motivation and the opportunity to make our client service more competitive than ever.

**In more general terms, how should custodians from non-T2S countries rethink their access and interaction with the T2S world, in your view?**

Banks in central and eastern Europe which act as a global custodian for local institutional investors will have to make their own investigations and calculations about the best way of accessing western European markets in order to serve their clients' interests. Obviously, volumes in central and eastern Europe are much smaller, meaning that all the changes that T2S may bring will be more technical than they are cost-efficient. Banks acting as a sub-custodian for western clients in central and eastern Europe will be forced to review their operating models, because the future will be all about asset servicing, rather than settlement.

**What is more likely or desirable in your view: that T2S expands further towards the east or that an initiative similar to T2S is tailored to eastern Europe?**

First of all, T2S must prove itself in western Europe before it makes any sense to talk about the expansion of the concept. In my view, T2S only makes sense in countries where the settlement currency of local securities trading is the euro. Second, the markets of central and eastern Europe are so different from each other in terms of development, and the cross-border activity between these countries is so limited, that it will take time before we can actually talk about the need to implement any kind of T2S concept, other than what the regional custodian banks can offer.