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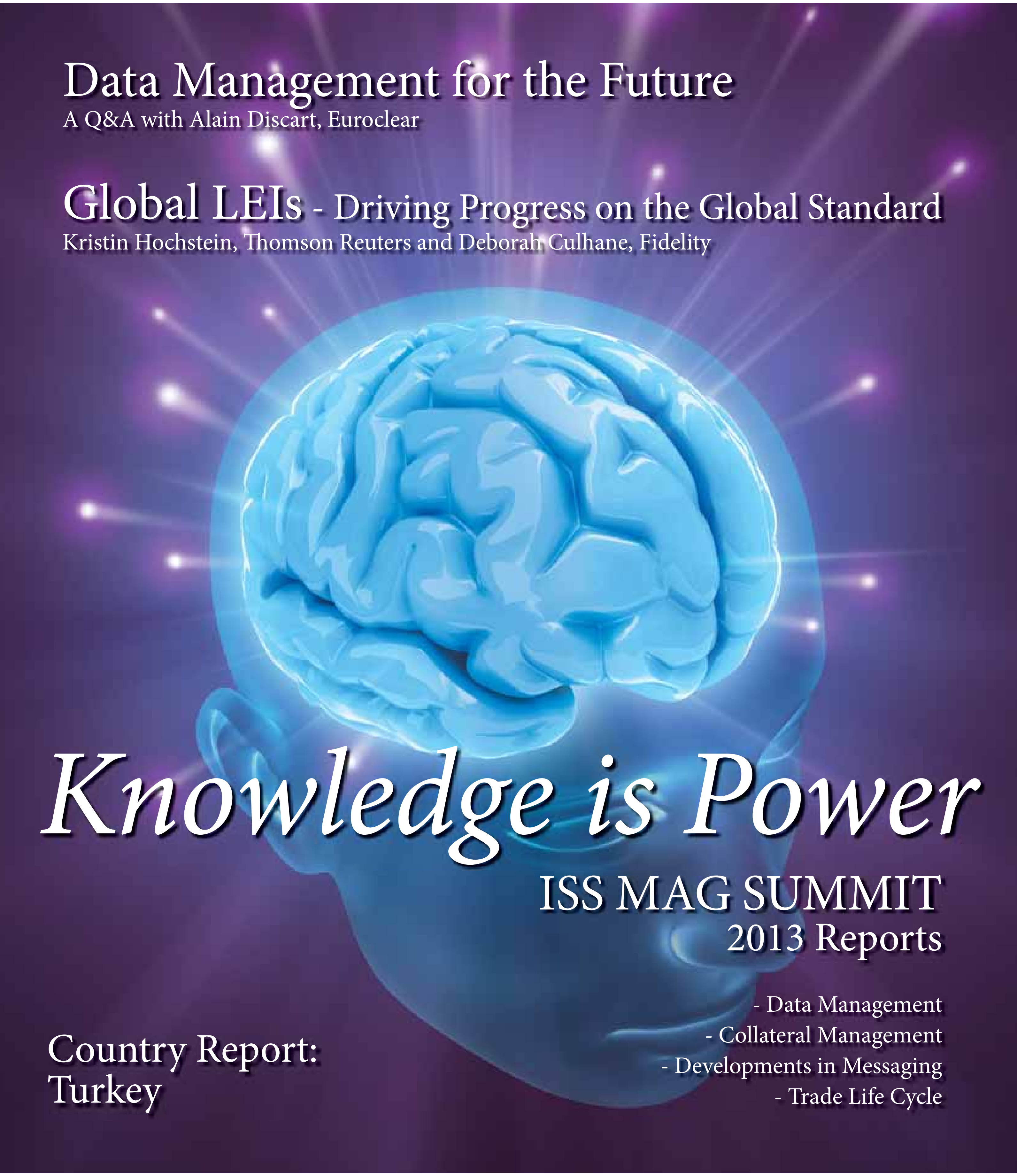
INTERNATIONAL SECURITIES SERVICES

Q1 2014



## Data Management for the Future

A Q&A with Alain Discart, Euroclear

## Global LEIs - Driving Progress on the Global Standard

Kristin Hochstein, Thomson Reuters and Deborah Culhane, Fidelity

# *Knowledge is Power*

## ISS MAG SUMMIT 2013 Reports

- Data Management
- Collateral Management
- Developments in Messaging
- Trade Life Cycle

## Country Report: Turkey

# EDITORIAL

## Q1 2014

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Published by:
Capital Markets Media Ltd.
31 - 35 Kirby Street
London EC1N 8TE



Welcome to the first print version ISS of 2014. If you are not already subscribed to our twice weekly email newsletter then go to www.iss-mag.com and sign up. It costs nothing to do so.

We kick off with a data feature and a Q and A with **Alain Discart** of Euroclear. Then **Kristen Hochstein** of Thomson Reuters and **Deborah Culhane** of Fidelity Investments discuss LEIs. **Mark Davies**, Head of Avox and **Bill Meenaghan**, Global Product Manager at Omgeo ALERT talk about the quality of data held and used by market participants and finally we include a transcript of the Data Management Session that was held at the ISS-MAG 2013 Summit at the end of last year featuring **Emma Kalliomaki** of London Stock Exchange Group, **Chris Johnson** of HSBC; **Graeme Austin**, CEO of ISITIC Europe, **Adam Cottingham** of Smartstream, **Paul Taylor** of Swift and **Tim Fox** of Avox.

We then have a fascinating insight into one of the world's most innovative organisations. **Johann Ruden**, president of Nasdaq OMX Clearing discusses the relationship between Clearing and Collateral, **Lars Ottersgard**, Senior Vice President, Head of Market Technology, talks about Nasdaq OMX's significant growth in the Post-trade Infrastructure and Services area and **John Jacobs** talks about plans to expand Nasdaq OMX's Global Index Business - which he runs.

**Joanne Gill**, Regional Head EMEA, Global Custody and Agency Services at BOAML tells us about the new requirements for all fund managers to appoint a depositary under AIFMD by July 22 2014. **Fiona Hamilton**, VP EMEA, Volante Technologies, reflects on the European implications of EMIR.

The ISS spotlight then falls on Turkey. We have an interview with both **Murat Ulus**, the CEO of Takasbank and **Yakup Ergincan**, CEO of Turkey's CSD, MKK. We then present a round table with a number of the Turkish markets service providers; **Ozgur Guneri**, the general manager of Finansinvest, **Necla Kucukcolak**, Head of International markets, Takasbank, **Pinar Sevsevil**, market specialist, Citi and **Ibrahim Yurtlu**, manager of securities services at HSBC all contribute and the overall impression we are given is of a modern, highly technical market infrastructure preparing itself for a surge in volume.

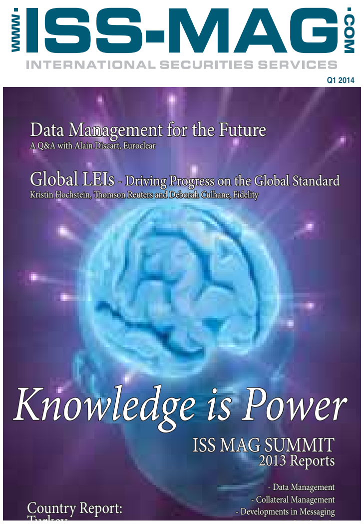
**Hugh Cumberland**, Solution Manager, Financial Services at Colt gives us the pros and cons on outsourcing, **Darryl Twiggs**, Head of Product Management at Smartstream talks about Trade Process Management and **Josee-Lynda Denis**, Chair of the ALFI TA and Distribution Forum gives us an overview of the Luxembourg Fund industry.

All the above articles and interviews will be distributed on our newsletter and links to them will be tweeted and sent to members of our Linkedin group. Join the debate online.

**Eddie Heaton**
**Managing Editor**
**International Securities Services**

# CONTENTS

ISS MAG Q1 2014








# CONTENTS







# Data Management For The Future

## A Q&A With Alain Discart, Director, Central Data Utility Product Management at Euroclear

ALAIN DISCART

### Legislation is changing the risk management landscape. How is this affecting data management? What is the new legislation trying to achieve?

The ultimate objectives of the regulatory changes include strengthening the capital base of banks as well as the overall resilience of the financial system. Increased reporting requirements, OTC trade repositories and unambiguous and uniform entity identification are all part of the legislative drive to achieve those objectives.

From a data management perspective, the issue is that many firms still carry a costly, convoluted and fragmented pre-crisis infrastructure that is ill-equipped to cope with the additional reporting that will be necessary to adhere to EMIR, Basel III and AIFMD, for example. To quote the Financial Stability Board: "good data and good analysis are the lifeblood of effective surveillance."

Despite considerable effort to bring about change, the quality of unrefined data used by firms often remains sub-optimal. The sourcing and processing of reference data remains a fragmented process, meaning that the data lineage and audit trails are not always easy to follow or demonstrate to regulators. Indeed, firms tend to source, process and cleanse data on instruments, entities and corporate actions independently from one another and often multiple times and in slightly different ways per business unit or product line. This data should, theoretically, be unequivocal, so from a regulatory perspective this is clearly not the way forward.

Arguably, one of the most effective ways to meet the objectives of the new legislation while keeping costs down is to improve overall data quality and standardise the processes around it. In order to improve data management efficiency and cut costs firms can also look at reducing their operational burden by mutualising the task of sourcing and cleansing data.

### Large banks often use multiple data feeds - what problems can this create?

Typically, banks run large and costly data infrastructures. Pre-crisis, conventional wisdom to improving the quality of reference data was to add extra databases and data feeds. Many firms continue this process even today. Their instinctive reaction is to provide every project and every department with its own segregated pool of reference data.

Unfortunately, this type of approach requires considerable investment in the appropriate technology to monitor a firm's investment into the acquisition and maintenance of reference data. Moreover, different data feeds need to be mapped and reconciled across different departments. Effectively, this complicates the process by adding cost and obscuring the level of transparency and uniformity. Despite the inefficiencies associated with this process, this traditional bespoke approach to data management is still common.

Some firms address the complexities and inefficiencies of the reference data world by making it somebody else's problem – the 'your mess for less' approach to data management, i.e. outsourcing.

The risk involved with outsourcing is that it tends to focus almost exclusively on the current state of the firms requirements. And, it can also mean that a firm finds itself in a long-term relationship with a service provider that lacks the agility to react and cope with future requirements.

> *"The definition of 'quality' is opaque in data management domains because the word's precise definition depends on where the data user sits in the trade lifecycle."*

### Why have SmartStream and Euroclear teamed up?

SmartStream and Euroclear have teamed up because the skills and assets that they bring to the table are complementary to each other. Euroclear brings international reach, operational and post-trade expertise and an established network of issuers. SmartStream brings purpose-built technology, relevant research skills, and the required infrastructure to import, cleanse, package and deliver data from multiple sources, including data vendors and data aggregators.

The fruit of this partnership, the Central Data Utility (CDU) is a unique data management service that streamlines data supply, improves data quality and significantly reduces data management costs (made up of the software license cost, data vendor feeds and trade break reconciliation costs).

### What is 'quality' data and is there a misconception concerning its definition?

The definition of 'quality' is opaque in data management domains because the word's precise definition depends on where the data user sits in the trade lifecycle. Pre-trade, settlement, risk management and finance typically have different trade-offs between speed and accuracy of information and usually also require different sets of information on instruments and counterparties.

Quality is one of the factors we track via the Key Performance Indicators (KPIs) that are part of the CDU service offering. We take a pragmatic approach in that we measure the proportion of erroneous data fields that are delivered to a client and compare it to a benchmark. If the proportion exceeds this established threshold then the client receives credits. We operate a similar process for the delivery time KPI. Deviations from agreed delivery times can also result in service credits.

# Global LEI – Driving Progress on the Global Standard

**Kristin Hochstein, Thomson Reuters**
**Deborah Culhane, Fidelity Investments**

## A Brief History of LEI Initiative

The development of a global standard for the identification of counterparties to financial transactions has been widely discussed by the industry for many years. Then, in 2008, the financial crisis created the necessary impetus for a significant collaboration of both industry participants and their regulatory counterparts to address the lack of a critical global entity identification standard to support the financial markets. This global standard was considered by regulators as a critical way to advance a key mandate under Dodd Frank: the establishment of a unique, globally-recognized and persistent identifier for all financial instruments and counterparties to financial transactions to aid in the identification of systemic financial risk. From the financial industry perspective, the benefits of this global standard were seen as both an opportunity to advance progress in the development of more comprehensive internal risk monitoring programs, as well as to provide a widely recognized global standard identifier which could support a number of internal technologies and data management strategies focused on improving operational efficiencies and controls.

In early 2011, with the backing of the G20, discussions with U.S. industry participants and regulators advanced to a broad-based global effort supported by a number of global financial firms, trade associations, regulators and other global standards experts. Some three years later, we now see the evidence of one of the most significant achievements in the advancement of global financial standards with the adoption of the Legal Entity Identifier (LEI) and nearly 190,000 registered entities representing institutions across more than 143 countries.

> *"Some of the first LOUs who will transition to Board oversight include DTCC/SWIFT, WM Daten, Insee, LSE, Irish Exchange, LEE and TakasBank."*

## Global Initiatives Taking Hold

January of this year marked a key milestone in establishing the long-term governance, oversight and development of the LEI with the creation of the Global LEI Board of Directors. Up until this time, the Regulatory Oversight Committee (ROC), which comprises a coalition of international regulators, had provided interim control and supervision for LEI guidance and implementation. With the transition of responsibility from the ROC to the private sector Global LEI Board of Directors, this board will now provide broad governance and oversight to the continued development of the LEI. One of the first responsibilities of this Board will be to ensure that the Local Operating Units (LOUs), who will support the registration, information validation and issuance of LEIs, are following consistent policies and practices to support a seamless global process with full interoperability between LOUs. Importantly, this requirement will ensure a structure is in place to make available complete and timely consolidated records for all globally

KRISTIN HOCHSTEIN

issued LEIs. Some of the first LOUs who will transition to Board oversight include DTCC/SWIFT, WM Daten, Insee, LSE, Irish Exchange, LEE and TakasBank. These LOUs have been assigned an operating designation and pre-fix and will comply with the outlined initial principles and practices as well as with ISO 17422, the standard that specifies the LEI code and its supporting attributes. All LOUs will continue to work with the new board to ensure they will execute basic validation processes, meet interoperability requirements and follow specific standards of information certification.

## LEI Global Governance and the Global LEI Foundation

With the pending Board of Directors in place, major initiatives will continue to progress under the guidance of the new board. Some of those initiatives include governance, long-term funding and day-to-day support of the foundation behind the LEI. Funding in particular will be critical to the long-term stability of the Global LEI initiative. This transition of oversight to the Board will represent a significant step forward in establishing a broader and consistent direction for ongoing implementation and backing of this critical new market standard. Ensuring consistency and standards, maintaining seamless collaboration amongst key players and enabling global acceptance and growth in adoption will be top priorities for this Board.

## LEI Adoption and Industry Impact

The goal of the LEI system remains unchanged as the first official, globally-recognized, unambiguous and persistent identifier of institutional entities active in the global financial markets. Initial adoption has been mandated through regulatory requirements both in the U.S. (CFTC) and in Europe (EMIR), requiring similar reporting of swap transactions. Expansion to other jurisdictions will continue, with plans announced for Monetary Authority of Singapore, Australian Monetary Authority, Canadian Regulatory Authorities and Hong Kong Regulators. Additionally, preliminary discussions are underway which could require expansive reporting of major asset classes and activity for quarterly and annual holdings in certain regulated markets.

The LEI has long-term benefits for the financial industry, not only for risk analysis but also other operational efficiency efforts, including straight-through processing. In the short term, however, the compelling call to action will continue to be driven by regulatory mandates, making it unlikely that the industry will drive substantial adoption.

With great anticipation and high hopes, the industry continues to expand efforts around Global LEI adoption. Institutional customers engaging in swaps activity already have seen the effects on customer information and client on-boarding systems. However, while there is a level of awareness by those directly involved in swaps trading, the broader financial services industry must continue to evaluate long-term deployment. Ultimately, firms will need to expand to integrate the Global LEI and associated entity data attributes, and as regulatory mandates continue, so will adoption of the global initiative.

DEBORAH CULHANE

# A Report from the Data Management Session at the ISS MAG Summit 2013

CHRIS JOHNSON

**Panelists:**

**Emma Kalliomaki**, head of SEDOL Masterfile, London Stock Exchanged Group

**Chris Johnson**, head of product management market data services, HSBC

**Graeme Austin**, CEO, ISITIC Europe

**Adam Cottingham**, vice president data management Smartstream

**Paul Taylor**, direct global matching Swift

**Tim Fox**, product manager, Avox

The Legal Entity Identifier (LEI) initiative is the latest effort to create a standard reference data system for the financial services industry. The data management session of the ISS Magazine Annual Post-trade Technology Summit explored some of the reasons why this process has taken so long.

LEI uniquely identifies every legal entity or structure, in any jurisdiction, that is party to a financial transaction by assigning it a 20-digit, alphanumeric reference code.

According to **Emma Kalliomaki**, head of SEDOL masterfile London Stock Exchange Group, reasons why previous initiatives failed include use of proprietary codes, large volumes of mapping exercises, cost and the absence of regulatory mandate forcing implementation.

> *"For the industry to gain maximum value from being allocated an LEI it needs to use it in its risk management across all asset classes."*
>
> **Graeme Austin**

**Chris Johnson**, head of product management market data services HSBC Securities Services observes that LEI itself has been under discussion for about 15 years. "The problem is that it is really hard to set standards. The challenge is getting a consistent thread of really important data that each firm does the same way."

Almost every other industry on the planet has managed to standardise itself through self-organisation, but financial services has failed to do so because of vested interests and the amount of money made out of lock-in and proprietary "so-called" standards. That is the view of **Graeme Austin**, CEO ISITC Europe, who is critical of both banks and data vendors.

"I think the discussion about what is proprietary and what can be standardised is important," says **Adam Cottingham**, vice president data management SmartStream, who is concerned that the LEI is limited by the structure of the local operating units (LOUs) which will serve end users in local jurisdictions to register legal entities and assign identifiers.

GRAEME AUSTIN

"There are only five active LOUs, there should be sixteen. Being able to walk through from an instrument ID to get an LEI is a challenge based on the fact that data management platforms have been implemented for taking data into firms, not providing integrity across the data or cross referencing IDs. So there is still a lot of work to do and most of that work will be on the integration side."

One of the reasons for slow progress towards the standard, according to **Paul Taylor**, director global matching Swift is that the cost of not having an LEI was compensated by sub-optimal legacy solutions, so that cost was not clearly visible.

> *"It is always easier to look back on something that has started and say 'That could have been done better and if we could rewrite it we might do it differently."*
>
> **Tim Fox**

"It only becomes visible when risk is there and that risk came out in 2008. At that moment efforts and energies focused and we have seen much progress – 100,000 LEIs have been issued in about a year and adoption is increasing rapidly."

The discussion then moved on to whether OTC derivatives were the most appropriate asset class to start with.

Avox product manager **Tim Fox** believes they are. "Adopted globally, the LEI will facilitate transparency around counterparty identification. - By its nature, OTC trading is less transparent than on-exchange trading, so it makes sense to start with OTC derivatives, particularly given the value of these transactions."

**Kalliomaki agrees,** "I know ESMA listed an appeal against the inclusion of exchange traded derivatives, but under Emir it looks like it will be both OTC and exchange traded, so I think really it is trying to put the umbrella over derivatives in its entirety. I think they are both as important as each other with regards to visibility and transparency, especially from a measuring and monitoring perspective."

When you are performing risk reporting, having extra, universally recognisable codes to identify that systemic risk has to be the right approach after what happened in 2008, observes **Johnson**. "So many of the new regulations are derivative-oriented and what that does is integrate the OTC asset class with all the non-traditional ones, which has to be a good thing. In terms of implementation, another good reason for starting with derivatives is that the systems tend to be newer and could absorb the field lengths, whereas if you were to try to do that with other asset classes it might take a few years to change the systems."


ADAM COTTINGHAM

> *There are only five active LOUs, there should be sixteen... there is still a lot of work to do and most of that work will be on the integration side.*
>
> **Adam Cottingham**

**Austin's** assessment of whether OTC derivatives were the best starting point was stark. "It doesn't matter what the industry thinks is the right asset class to start with - what we have got to remember is that the regulators have decided OTC is what they are concerned about and if they are concerned about it then we need to be. However, it shouldn't be the finishing point. For the industry to gain maximum value from being allocated an LEI it needs to use it in its risk management across all asset classes."

When asked whether an ongoing, extra layer of systemic risk might be added from the extra message mapping back to the codes for legal identifiers within each system, **Johnson's** advice was not to use LEI as the primary key.

"Have it in your system as something you add as soon as it's available, but given than the LEIs may not be available until the next day, don't stop trading while you are waiting for an LEI or have a dummy LEI while you are waiting. It is crucial not to depend on external data for your internal process."

The smaller the firm the more likely they are to take a less sophisticated approach to addressing using LEI, says **Austin**. "They will find the route which involves the least effort on their part to obtain the LEI in their name and the ability to trade report the counterparty LEI through their systems and out to the trade repositories."

**Fox** cannot see banks' internal proprietary schemes disappearing any time soon. "Banks have relationships with a variety of entities, some of which will not be covered by the LEI, for example branches. Therefore banks will need to maintain alternative proprietary schemes."

Being able to integrate with internal, disparate data sets and being able to give completeness across data sets requires a degree of matching and confidence in the matching that is acquired because absolute matching creates more matching breaks and more work, warns **Cottingham.**

The benefit of the LEI is that you have one foundation element on which you can start to cross-reference all the others, notes **Taylor**. "So instead of doing multi-to-multi you can do one-to-many and that will already start reducing the cost. Data vendors and service providers are also starting to provide mapping tables. As people start to adopt the LEI as this foundational element it will become one of the primary keys in the systems as they are replaced over time. That is when even more of the benefits will be visible."

"Consider Rating Agencies, which are fundamental in the identification of issuers", adds Fox. "They all use their own Entity ID schemes, which data consumers have to map to their internal records. If the Rating Agencies were to adopt the LEI, this would represent a leap forward for this initiative. "

Consistency among LOUs will be achieved in a number of ways, explains **Kalliomaki**. "First and foremost there are the principles that have been mandated from the LEI Regulatory Oversight Committee. There are still issues to do with standardisation around certain data attributes, but I think this is one of the first standards where there has been true collaboration between regulators, the private sector and the operational practitioners. We are still waiting for the Global LEI Foundation to be put into place, but I do think things have been moving quite positively."

**Austin** believes the Regulatory Oversight Committee has done an excellent job in engaging stakeholders, but expresses concern about the efficiency of the system when LOUs are being on-boarded to handle LEI based reporting in asset classes that perhaps don't even exist now and whether those LOUs will be allowed to be less consistent. "I don't want that to be the case since we should be able as an industry to efficiently run an ID system," he says.

> *There are still issues to do with standardisation around certain data attributes, but I think this is one of the first standards where there has been true collaboration between regulators, the private sector and the operational practitioners.*
>
> **Emma Kalliomaki**

"It is always easier to look back on something that has started and say 'That could have been done better and if we could rewrite it we might do it differently'," says **Fox** in response to the question of whether Europe could benefit from the experiences of the US.

"European based regulators who are looking to implement LEI can benefit from the experience of others, as well as the subsequent changes to LEI data sets and the way the code is allocated. It took the Commodity Futures Trading Commission (CFTC) to get the ball rolling, a starting point from which the global initiative is now benefiting. This has got to be a good thing. "

**Austin** describes the idea of having more than one place to get an LEI as a fundamental change from the original CFTC project. "The one thing that we in Europe haven't needed to learn and one thing that I hope the US does eventually take on board is that going out on its own to begin with and not being part of an international community is not the way to play in this modern world," he concludes.

# Fiona Hamilton, VP EMEA, Volante Technologies, reflects on the European implications of EMIR

FIONA HAMILTON

*European Market and Infrastructure Regulation (EMIR), which takes full effect this year, requires both counterparties to a derivative securities transaction to report the details of a covered trade to one of the six trade repositories recognised by the European Securities and Markets Association (ESMA). Dual reporting responsibility has led to industry concerns that data will be fragmented and duplicated.*

## Impact of messaging on EMIR Trade Repository Reporting

Trade repositories are shaping up to be one of the lasting legacies of the global financial crisis.

Pre-crisis, regulators would only intervene with a large trade involving derivative securities in the event of the failure of one of the counterparties. Now, following the clean-up to the financial crisis along with subsequent high-profile hedging failures, regulators are demanding daily information about derivative trades, starting from clearing and settlement and continuing through to expiration of the underlying contracts. Regulators intend to use aggregated data contained within the market's new trade repositories to make sense of the global marketplace and to head off problems before they occur, or at the very least, to perform better post-mortems.

The value that trade repositories regulators receive depends on full participation from financial institutions and non-financial companies trading with European Union counterparties. Because of this, regulators will be insistent on demands for compliance. Furthermore, over time, we can expect data requirements to increase for a wider range of firms across a broader class of financial instruments.

## The global reach of trade repositories

In addition to the responsibility being on the part of both counterparties, EMIR also obligates counterparties, to post collateral and margin for the underlying positions and contribute to the default fund of their central counterparty (CCP) clearing firm.

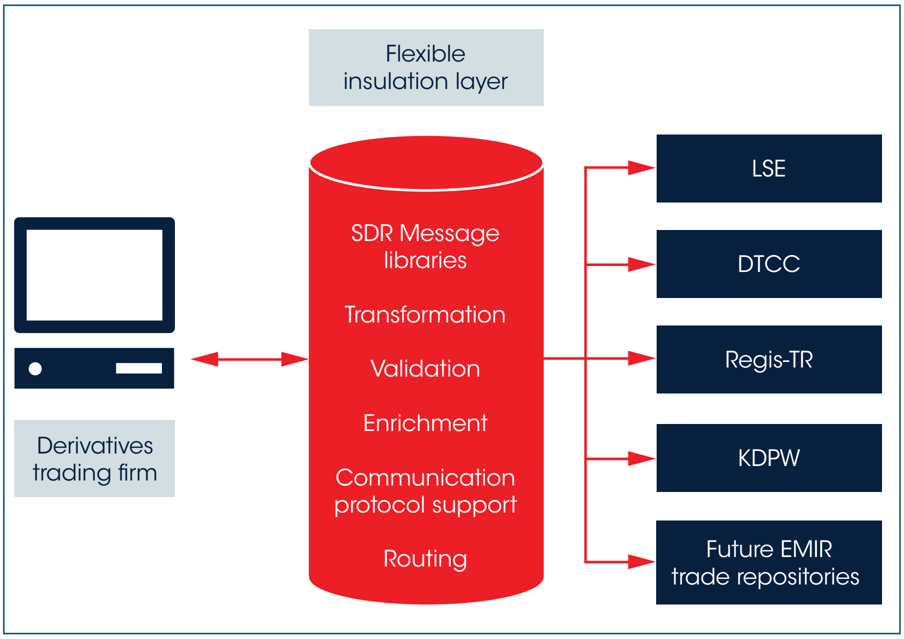
The post-crisis regulatory push also affects firms in industries upstream to the trade. In the wholesale energy markets, traders in the European Union are now subject to regulation on Wholesale Energy Market Integrity and Transparency (REMIT) requirements. Participants in the energy markets will have to disclose a wide range of "inside information" to regulators, including the details of financial contracts related to power, gas and commodities. For energy producers, distributors and traders, the disclosure requirements of REMIT compound the compliance challenge of EMIR throughout the trading lifecycle.

The push toward trade repositories is a global phenomenon. The Dodd-Frank Act in the U.S. requires data reporting for over-the-counter (OTC) swaps across asset classes including interest rates, credit default instruments, equities, commodities and foreign exchange instruments. Similarly, other countries across Asia-Pacific and EMEA are introducing national trade repositories, with global standards emerging slowly, at best. In the emerging environment, counterparties doing business cross-border will have to comply with the requirements of many jurisdictions.

The net result of the regulatory push is that a wide range of corporate entities, trading firms and broker-dealers must build and manage the capability to report to any number of trade repositories across multiple regions. Beyond simply meeting the requirement, firms will be challenged to achieve efficiency in terms of operating costs and effectiveness of data accuracy. Furthermore, firms have to be flexible in order to accommodate pending regulatory decisions and clarifications about applicability in certain situations, along with other changes likely to arrive in the near future.

## Implications for messaging and data integration

As time moves on, it is expected that the expanded scope and usage of CCPs will reduce the complexity of the overall



messaging requirements for trading firms. Rather than maintaining a large number of point-to-point connections for OTC derivatives or handle multiple standards from various exchanges, firms will only need to meet the data integration standards of the CCPs. In other words, once everything is cleared through a CCP, meeting the CCP's data standard will ease.

Arriving at that virtuous state however, currently represents a significant effort for the typical capital markets firm. Even if a firm does all of its trading through a single CCP – which is typically not the case – there are still numerous challenges involved with instituting new processes, aggregating trade data, looking up legal entity identifiers, generating unique identifiers for trades and instruments and sharing data across institutional silos, with customers, brokers and clearing members.

Non-financial companies face similar pressure as trading firms reshape their processes and messages to comply with the regulatory demand for trade repository data. The reporting requirement applies to all firms entering into derivative contracts, even those with volumes below the clearing threshold for central clearing. While it's possible – and likely – that non-financial firms will opt to have their brokers send reports to the trade repository on their behalf, the fact remains that corporate entities will be responsible for providing key data elements for those reports. Furthermore, that information will have to be provided quickly, no later than one working day following the relevant event for EMIR, and on a same-day basis for Dodd-Frank compliance.

Multiple issues will need to be addressed in messaging and data integration. These include:

### *Generating unique identifiers*

The data standards for trade repository reporting rely upon several unique identifiers.

**Legal Entity Identifiers (LEI)** are required for counterparties as well as broker; the reporting entity, the clearing member, the beneficiary not forgetting, the CCP involved with the trade. The financial services industry has established LEI authorities to maintain information about market participants, accessible through industry utilities that provide the relevant data to be incorporated into trade repository messages.

**Unique Product Identifiers (UPI)** consists of identifiers from the International Swaps and Derivatives Association (ISDA), ISIN (International Securities Identification Number) and other taxonomies. As financial instruments become more complex and bespoke, the ability to find an exact match within the standard taxonomies may become more challenging. Considering the regulators desire to capture comprehensive information about market exposures, further development and standards in this area, should be anticipated.

**Unique Trade Identifiers (UTI)** are issued by trading venues in the case of exchange-traded derivatives, or, are generated either by one of the counterparties to an OTC transaction or by a designated third party.

### *Connecting to multiple repositories*

The market will need to support multiple trade repositories based on the preferences and characteristics of market participants. Some organizations will tend toward the low-cost provider, while others will make choices based on existing business relationships, geographical preferences, or market specialisation in given asset classes.

Yet, even if a trading firm has a preferred clearing venue with a preferred trade repository, global trading calls for connections to multiple repositories around the world, in line with the diversity of counterparties in a global market. Even when trade repositories request the same data elements, there will be differences in connectivity methods, different versions and variants of common standards, proprietary implementations in support of value-added services, or other such differences in how data is to be coded.

> *"For the purposes of trade reporting and EMIR compliance, the trading activity of a firm should be managed through central resources."*

### *Monitoring the clearing threshold*

The clearing threshold is the point at which a trading firm is obligated to use central clearing. Firms approaching the clearing threshold (EUR 1 billion and upwards, depending on the type of derivatives being cleared), have to monitor the extent of the notional value of their outstanding derivative contracts at any given time to determine whether central clearing is required or not.

Regardless of whether a firm hits the clearing threshold, trading entities still have to report trades to a trade repository. While it's possible for each individual trading entity to create and submit its own reports, from an efficiency standpoint, it makes more sense to centralise the function at the firm level.

### *Aggregating trades across an organization*

For a large financial institution or indeed non-financial firm, trading activities involving derivative securities may span multiple functional areas, business units and geographies. Other complexities are introduced when a single underlying transaction involves multiple components involving derivatives. An example is when a commodities purchase is hedged by interest rate swaps, foreign exchange swaps and commodities futures, forwards and options. Different traders are likely to handle different aspects of trades for different parts of the business.

However, for the purposes of trade reporting and EMIR compliance, the trading activity of a firm should be managed through central resources. That's the best way to ensure that all of the components of a trade are coded and reported using a consistent set of identifiers.

### *Maintaining connectivity with customers and clearing members*

In order to monitor liquidity and rollover risk, regulators want to maintain information about exposures throughout the lifespan of the derivative contracts stored in the trade repositories. This means that counterparties, their beneficiaries and financial intermediaries, have to stay connected not just at the outset of a contract, but until its expiration. Indeed, the broker-dealer that executes the initial trade may not be the same broker-dealer that closes out the trade, and so broker-dealers must maintain the capability to transfer client information to another broker.

Some trading scenarios are relatively simple, such as when two clearing members of a qualifying CCP enter into a trade. At the other end of the complexity scale, a counterparty representing multiple levels of beneficiary owners may enter into an indirect arrangement with the client of a clearing member. No matter the level of complexity of the underlying transaction, the trade repository must act as an accurate storehouse of up-to-date information. Considering that counterparties are responsible for maintaining margin and collateral, and have to contribute to the CCP's default fund, it is in everyone's interest to keep the required information accurate and current.

## A single-source solution

The extensive data and messaging requirements involved with trade repository reporting make it likely that many counterparties will seek to push the responsibility to a third party, whether to the other counterparty, a financial intermediary or a reporting utility. There are two main problems with this approach: first, the responsibility for accuracy still rests with the original counterparty; and second, it may not always be possible to slough-off the responsibility for reporting a given trade depending on the complexity of the underlying financial instruments.

The stopgap solution is to meet the reporting requirements using spreadsheets and other manual processes. However, spreadsheets scale poorly and are subject to errors in reconciliation. Furthermore, the stopgap approach limits the ability of a firm to take an enterprise-wide approach to compliance with trade repository reporting.

A smarter, long-term approach is to establish a reusable, easy-to-manage software solution to manage the various data flows between counterparties, clients, beneficiaries, CCPs and trade repositories. The goal should be to develop a standards-driven, enterprise approach to financial messaging, in order to issue reports to the relevant counterparties and trade repositories quickly and accurately, getting it right the first time.

Each of the processes outlined previously – generating unique identifiers, connecting to multiple repositories, monitoring the clearing threshold and aggregating trades – will require an enterprise approach to message integration as an essential part of trade reporting.

Considering the nascent stage of the regulation, the continued evolution of data standards and the expected transformation of post-trade business processes, it is essential to build the capacity to respond to change from the outset. As new business requirements emerge, they should be accommodated rapidly within the framework of existing solutions, with assurance to traders and clients that trade repository reporting will be maintained consistently throughout all trading desks and business units of a firm.

The way forward starts by identifying the entities within your organization where trades are generated, as well as the individual trading desks within those entities. Instead of taking a separate approach for each trading desk and treasury system, deploy a set of enterprise resources to manage the specific business processes involved with every combination of financial instrument, counterparty and trading intermediary.

One of the most challenging aspects of this exercise will be to accommodate multiple versions of middleware, services, cloud-based architectures, application servers and databases used by individual trading desks. Trading operations may have been established at different times, for different purposes, and at different stages of adoption of modern IT approaches. Accordingly, a comprehensive solution for trade reporting has to be capable of communicating with the entire range of solutions used within your enterprise, whether the data source is a legacy mainframe or a cloud-based service.

Aside from the technology considerations, trading firms need to build the organizational capability to respond to periodic updates to standards as well as unexpected changes in the global market. Each year, industry standards in financial messaging evolve to take account of new financial instruments, data requirements and regulatory mandates.

In addition, inter-industry relationships are undergoing major changes, both in terms of customers' global footprints and in the fast-changing relationships that trading firms have with trading venues, CCPs and custodians. Firms that handle trade data effectively throughout the organization are in a stronger position to react to these strategic changes, positioning themselves for whatever unknowns the future may hold.

A single-source, enterprise-scoped approach to the supporting technology can enable firms to achieve painless compliance with the complexities of trade repository reporting, with improved reconciliation for operations, higher assurance to end-users and stronger risk management practices for corporate treasury.

# Choosing the Right Depositary

## AIFMD Best Practices, Risks and Opportunities

**Joanne Gill**
**Regional Head EMEA**
**Regional Manager – Global Custody & Agency Services for Bank Of America Meryll Lynch**

JOANNE GILL

*Alternative Investment Fund Managers who seek to raise capital in Europe face a ticking clock. The EU Alternative Investment Fund Managers Directive (AIFMD[1]) will require them to appoint a depositary to oversee the custody of all fund assets by July 22, 2014. Those who act ahead of this fast-approaching deadline can achieve a variety of benefits, from more efficient implementation to a competitive edge.*

### Regulatory milestone

The Alternative Investment Fund Managers Directive is expected to have further impact on the European investment management industry which has already been impacted by UCITS and MIFID. For the first time, alternative investment funds (AIFs) will require the services of a depositary.

Essentially a custodian with expanded responsibilities, a depositary will provide cash-flow monitoring, safe custody and oversight services for the AIF. Liability is typically limited, and in some cases, transferred to a third-party. This will change with AIFMD.

> *Selecting an appropriate depositary will be one of the most important strategic decisions facing fund managers as they work toward AIFMD compliance.*

### Full liability requirements

AIFMD redefines the relationship between AIFs and their custodians. Working as an independent provider, the depositary will assume full liability of assets in each fund under management. In the event that the depositary or appointed custodian loses a financial asset, the depositary must provide an identical replacement or an equivalent monetary amount.

This new rule on depositary liability is part of the AIFMD's broad objective to harmonize regulatory standards among AIFs, level the regulatory playing field in the EU, and improve the stability of the global financial system. Selecting an appropriate depositary will be one of the most important decisions facing fund managers as they work toward AIFMD compliance.

### A depositary is a custodian with enhanced responsibilities

AIFMD requires fund managers to appoint a depositary to ensure that assets are safe, cash is carefully monitored and fund operations are executed correctly. According to the Directive, a depositary, for example:

- Must be established in the same EU member state as the EU AIF
- May be a credit institution established in another EU member state, but only until July 22, 2017
- May be a prime broker if it has functionally and hierarchically separated its depositary functions
- Cannot be an AIFM acting as a depositary of its own funds

### Full depositary

By July 22, 2014, EU managers of EU-based AIFs will be required to appoint a single depositary that will be liable for any loss of assets. This strict liability requirement complies with Article 21 of AIFMD, known as "full depositary." Authorized EU AIFMs of EU-based AIFs will be required to appoint a single depositary in the home Member State of the EU AIF.

Although the scope of this Directive is aimed, primarily at AIFMs who have their registered office within a EU Member State, its scope has global implications as it also includes AIFMs whose registered office is in a third country. AIFs include, for example, hedge funds, funds of hedge funds, venture capital, private equity and real estate funds.

### Depositary lite

EU-AIFMs of non-EU-based AIFs face the same July 22, 2014 deadline, but may opt to pursue a "depositary lite" option. As the name suggests, depositary lite is a scaled-down version of the full depositary requirement. It permits non-EU AIFs to use a network of third-party providers for custodial responsibilities until 2018, when all AIFMs must meet AIFMD full depositary requirements. The critical distinction prior to 2018 is that depositary lite does not require full liability of assets.


**Main duties of the depositary**

With full liability, the depositary takes on the credit risk of its counterparty, which enhances investor protection, but has the potential to raise fees. The phased approach of depositary lite offers AIFs the temporary advantage of moderating resource costs and operational disruptions associated with implementation.

However, AIFMs may want to weigh the short-run cost savings of applying the depositary lite requirements versus the need to implement the full depositary requirements (as defined in the EU AIFMD) in 2018. Some third-party providers offering depositary lite services may not have the regulatory authorizations to fulfil the full depositary obligation before the next deadline arrives in 2018. A service provider or depositary with the scale to deliver a full depositary solution may result in the most operationally efficient and cost-effective option in the long run, depending on the complexity of the AIFs structure, existing service provider relationships and resources.

> *"An existing prime broker relationship, combined with custodial services, creates a platform for implementing AIFMD and streamlining the procedures required to monitor AIF activity."*

## Prime brokerage solution

AIFMD allows a financial institution to act as a prime broker and depositary for the same AIF if the prime broker and depositary functions are functionally and hierarchically separated. The Directive also requires any conflicts of interest to be fully managed and disclosed. After meeting these regulatory requirements, and the broader requirements of the AIFMD, an in-house prime brokerage can deliver a quick-to-market compliant solution.

> *"Winners in this regulatory race can outpace their peers with an integrated response that takes the pain out of compliance and streamlines their operations."*

An existing prime broker relationship, combined with custodial services, creates a platform for implementing AIFMD and streamlining the procedures required to monitor AIF activity. A "custodian prime broker" also eliminates the need for an asset exchange when switching from a prime brokerage account into a legally segregated custody account. And with dual securities processing and custody services, the in-house prime broker fulfills its traditional role of helping fund managers achieve their investment objectives, manage risk and maximize fund efficiency.

## Alternative best practices

AIFMD has a broad regulatory purview that will impose significant changes on AIF structures, strategies and operations. Regulatory compliance may be more complex for certain fund types and may require alternative strategies.

While working with one bank for both prime brokerage and custody services offers significant advantages, clients may be happy with their existing arrangements and unwilling – especially given a potential deadline of July 2014 – to change them in the short term. An off-the-shelf custody arrangement offers a best-practice alternative. Facilitated through a bank, this arrangement includes pre-drafted sub-custody agreements for brokers or third-party administrators.

Depositary lite may offer a short-term solution for certain EU authorised AIFMS of non-EU AIFs. However, it may also pose a challenge for custodians to meet the AIFMD requirement of monitoring cash across the market. Fund managers pursuing this strategy should ensure that their selected custodian offers a cross-migrating solution between its client groups. AIFMD compliance requires that the custodian or prime broker provide appropriate global securities and cash settlement, reporting and monitoring capabilities.

## Risks and opportunities

It's important for fund managers to understand that AIFMD requires a depositary to be in place before their organizations can be authorized under the Directive. Fund managers who delay may face a provider bottleneck. An influx of new clients could potentially force these depositaries to stop accepting new AIFs in early 2014 as a way to mitigate risk.

AIFMs who plan ahead will be better positioned to make the most of AIFMD. Winners in this regulatory race can outpace their peers with an integrated response that takes the pain out of compliance and streamlines their operations, while gaining an edge in managing client expectations, deepening relationships and attracting new investors.

1 - Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010



# It's Time For Growth

## Lars Ottersgard, Senior Vice President, Head of Market Technology, Nasdaq OMX

LARS OTTERSGÅRD

*Current and future regulatory developments are creating significant opportunities in post-trade infrastructure and services at Nasdaq OMX.*

Nasdaq OMX provides trading, exchange technology, information and public company services across six continents to more than 10,000 customers including public and private entities, exchanges, regulators and broker-dealers. The creator of the world's first electronic stock market, its technology powers more than 80 marketplaces in 50 countries and approximately 1 in 10 of the world's securities transactions.

Lars Ottersgård, senior vice president, head of market technology says the company is seeing significant interest and growth in the post-trade infrastructure and services area – including clearing, CSD solutions and of course risk management – driven by changes in regulations such as CSDR, EMIR and T2S.

"This is evident across all asset classes and all regions. Mature regions like the US and Europe are particularly attractive and the rules in these regions are opening competitive borders that have in the past been the preserve of just a few players. EMIR, for example, creates huge growth opportunity in both clearing and CSD.

"We own and operate three clearing houses and five CSDs and through the process of preparing ourselves to meet a number of the new rules and challenges encompassed in these regulations, we have been able to capture requirements and build them into our commercial solutions."

Given regulatory requirements, traditionally more 'back-office' systems need to be updated to manage the rules. They need to be able to calculate a more comprehensive picture and analysis of cross-asset risk and exposure and employ more robust capabilities for collateral and risk management.

"Within our solutions, we have paid close attention to these needs and believe that we have a very competitive offering for clearing, CSDs and enterprise risk (encompassing pre-trade, at-trade and post-trade risk management)," Ottersgård continues. "Once firms really start to grasp the new rules and implement them, the next opportunity is for those technology providers that can help their clearing and CSD customers compete through the creation of more innovative offerings and services."

"Collateral is of huge interest everywhere due to OTC clearing requirements (especially in the US, Europe and the G20 countries) creating increased need for collateral and of course in Asia as well. As more asset classes are going for central clearing and clearing houses are looking to become more efficient, demand for collateral management is increasing."

It was suggested recently that one London-based clearing house might introduce more frequent margin calls, moving from three per day to as many as one every 15 minutes over a 20 hour period. However, Johan Rudén, president Nasdaq OMX clearing says it doesn't see the need for introducing additional margin calls.

> *"We are tracking all positions in real time and if needed we can make an intra-day margin call at any time."* **Johan Ruden**

"We are tracking all positions in real time and if needed we can make an intra-day margin call at any time. Also, some of our products are cleared with pre-novation, where we verify that enough collateral is available before accepting the trade for clearing."

When asked whether the proposed European financial transaction tax (FTT) might affect

**In January, Nasdaq OMX opened a new office in Bangalore. Lars Ottersgård says the company is positive about the prospects for emerging markets.**

**"In the last 12 months we have also opened support operations in Nagercoil and Manila and across the Asia Pacific region we now have more than 750 employees. These new operations bring us a group of highly educated colleagues who will enable us to elevate our support and development organisations and continue to scale and innovate in a cost-effective manner.**

**"We are supportive of emerging markets and see great growth potential in these markets. As a technology and infrastructure provider, we already have a massive presence in Latin America, Africa, areas of the Middle East and south east Asia. All economies have their ups and down, but we partner with our customers for the long term. Within our market technology business, we are committed to helping our customers no matter how their strategies and economies shift and evolve."**

JOHAN RUDEN

collateral movement, he adds that if the FTT forces derivatives trading to move to other markets, clearing and collateral will likely follow.

Rudén outlined the volume of work Nasdaq OMX has had to do to ensure compliance with existing and forthcoming regulations such as EMIR and the extent to which that work will continue through 2014.

"We are measuring the effort to receive an EMIR licence in thousands of hours. We spent nearly three years converting our clearing houses to meet the new standards. Over this time, we have also developed a completely new collateral management system and have already migrated more than 900 members to the new solution. The effort will reduce dramatically during 2014, but clearly the base load of compliance work will be substantially higher than prior to EMIR."

While growth naturally attracts competition, Ottersgård observes that to date Nasdaq OMX has not noticed any new market entrants. "However, that is not to say that this situation will continue, so we (and those that already compete with us) need to maintain focus to capitalise on some of these newer opportunities."

The most significant development in the exchange world in recent times is the purchase of NYSE Euronext by IntercontinentalExchange (ICE). A joint bid for NYSE Euronext by ICE and Nasdaq OMX was abandoned in 2012 following discussions with the antitrust division of the US Department of Justice. "Within the market technology business, we have seen very limited impact from this deal," adds Ottersgård.

John Jacobs, who runs Nasdaq OMX's global index business, talked about the company's plans to expand the index business. "Our index business is constantly evolving but we are focusing on three main areas this year: partnering with ETF firms to roll out new ETFs in the US, Asia, South America and Europe; continuing to launch 'smart beta' indexes for buy-side and sell-side customers; and expanding index asset coverage by creating more indexes in fixed income, commodities and multi-asset sectors."

In the ETF space, he notes that expansion is being driven by firms choosing to work with Nasdaq OMX rather than the company going out and identifying potential partners. "ETP providers, registered investment advisers and other institutions tell us they are attracted to our rules-based, transparent index construction, comprehensive index services offering, the brand visibility of being attached to Nasdaq and our ability to quickly bring new offerings to market."

"Additionally, although the US has been the dominant market for index-based investing, we are seeing a strong growth in adoption rates worldwide for both the flagship products (Nasdaq 100, Nasdaq Composite) and products tailored to local investor preferences and the local market environment.

> *"Mature regions like the US and Europe are particularly attractive and the rules in these regions are opening competitive borders that have in the past been the preserve of just a few players."*
>
> **Lars Ottersgård**

"We are continually speaking with ETP providers and currently see excellent opportunities in the Asia Pacific region. Conversely, we often approach ETF sponsors/providers with concepts we create in-house, for example when we have smart beta ideas or other indexes that may be a natural fit for a specific provider."

Ottersgård explains that there are usually three sources of ideas for new ETFs:

- Unique content getting pitched to a provider
- Registered investment advisers and other users looking for a solution that doesn't exist
- ETF providers developing a product and requesting to work with the company

"Demand for smart beta strategies has grown in recent years because firms - and not just in the registered investment adviser community - come to us looking for more outcome-oriented indexes that support strategic investing models. This allows them to use one benchmark for exposure to a desired outcome and thus simplify their overall investing with a rules-based tactical model."

JOHN JACOBS

When asked to outline the factors that have convinced the company that there is demand for new fixed income, commodities and multi-asset indexes, he observes that investors are looking for diversification.

"If you look at fund flows and the types of new products in the market, you can see that investors are still seeking more quantitative strategies and other asset classes. In 2013, we launched nine ETPs in Europe on our commodity index family, as well significantly expanding our BulletShares fixed income ETFs."

For the average investor, it can be difficult to invest in individual bonds (due to spreads widening and minimum trade size requirements) and most bond ETFs don't deliver bond-like performance due to the index rules. So the move towards bond funds that act like a bond and deliver the definition and permanence is gaining momentum through the use of ETFs with a defined maturity, Ottersgård concludes.

"On the multi-asset front - such as MDIV (First Trust Multi-Asset Diversified Income Index Fund with more than $530m assets under management) - investors are again looking for diversification opportunities to ensure they are not overweight in one area, but doing so in a non-complicated way."

# Data Quality: Whose Responsibility

**Mark Davies, Head of Avox and Bill Meenaghan, Global Product Manager, Omgeo ALERT**

BILL MEENAGHAN

MARK DAVIES

*One component in the far-reaching efforts to redress the failings of the financial system post-crisis is the focus on data quality.*

In 2008, the Financial Stability Board's Senior Supervisors Group (SSG) sponsored a new counterparty exposure data collection programme to measure improvements in market participants' ability to produce accurate and timely counterparty information. Worryingly, the group's recent report finds that progress to date fails to meet supervisory expectations, highlighting data quality as an area of concern;

*"Recurring data errors indicate that many firms are below SSG benchmark standards for data quality and cannot measure and monitor the accuracy of the data they submit or rectify quality issues in a timely manner."*

The lack of progress towards a wholesale improvement in data quality is worrying given its criticality to client on-boarding and Know-Your-Customer requirements; trade settlement and reporting; and risk calculations. Flaws in information feeding into these processes will result in unexpected outcomes or affect accuracy of risk assessments – which neither regulators nor market participants want.

## Improving data quality

Incorrect data is not always a result of negligence; over the normal course of business, firms change their company information which renders counterparty data out of date. But the problem of poor data has grown over time through insufficient maintenance, excessive duplication and dormant records. Given the potentially thousands of counterparties that some institutions have on their books, maintaining one version of the 'truth' is hard enough. Additionally, the complex architecture that many firms run as a consequence of mergers and product, business or geographic silos, can make it almost impossible to separate good data from bad. Moreover, managing the vast amount of counterparty data is challenging and requires dedicated resources, which are often in short supply.

But irrespective of these challenges, the problem needs to be addressed and data must be maintained on an ongoing basis. The SSG notes that data errors over the past five years have not diminished proportionally to the adoption of automated capabilities but it is our view that automation alone cannot guarantee data accuracy. It requires dedicated research and expertise; knowledge of where data can be sourced and checked; the ability to adapt to hundreds of languages; and ultimately, human oversight to definitively find the correct information.

> *"The complex architecture that many firms run as a consequence of mergers and product, business or geographic silos, can make it almost impossible to separate good data from bad."*

## The market, regulator and providers' role

Market participants are aware of (and frustrated by) data errors that impact business processes. In research conducted by Omgeo, nearly half of the banks surveyed said that 30 percent or more of trade fails were due to settlement instruction issues, potentially caused by incorrect underlying data.* And in terms of market participants' ability to produce timely counterparty information, in a separate survey, 60 percent of respondents cited the need for counterparties to submit trade details in a more timely fashion when it comes to achieving faster trade settlement times.*

Ultimately, it is the responsibility of financial institutions to ensure the information used in business processes and meeting compliance requirements is accurate. We see two avenues to ease this burden. Firstly, through greater involvement from the custodian community in helping buy-side firms maintain and update data. This view is shared by the custodian community; 63 percent of banks agree they should have more involvement**. Secondly, following a trend we are seeing in the financial markets, market participants should be looking to capitalise on more collaborative approaches to managing data. Sharing data cleansing and maintenance efforts across the industry via a centralized utility increases efficiency and drives quality improvements through shared expertise.

But regulators have a role too. Regulatory mandates, in all areas of the financial markets, can help to drive and harmonise behaviours. Currently there are no guidelines relating to how frequently data should be checked, updated and verified. While introducing mandates would be difficult to monitor and enforce, regulators can contribute towards improving data quality through the introduction and implementation of standards, for example, extending the efforts that have been made around the legal entity identifier.

Finally, data solution providers and market infrastructures should continue to help industry participants by developing new ways of easing the burden of data maintenance, and making this accessible in a cost-effective way.

What is absolutely critical is that the market, regulators and providers keep data quality top of mind because the message from the SSG is clear: in the five years since the global financial crisis, there has been little progress towards an improvement in data quality. Only when we are dealing with the correct information can we hope to overcome the failings of the last crisis, promote the safety and integrity of the financial markets.

*Custodian Banks and Settlement Instructions, Bank Survey, Omgeo, July 2011

**Preparing for T+2 Settlement: A Review of Global Industry Readiness for Achieving Shorter Settlement Timetables, November 2012

# 'Turkish Delight'

## An interview with Yakup Ergincan, CEO, MKK Central Securities Depository (or CSD) of Turkey

**ISS: Can you tell us a little bit about MKKs new services such as electronic voting and general meeting, which have become possible because of the regulatory change.**

According to the new Turkish Commercial Code, which was enacted on 13 January 2011, listed companies in Turkey are obliged to hold physical general assembly meetings as well as electronic meetings simultaneously, and build a system to enable the exercising of shareholder rights on an electronic medium. Furthermore, the articles concerning corporate governance, general meetings and voting in the new Capital Markets Law no 6362, which was enacted on 6 December 2012, stipulate that electronic general meetings shall be held on the platform developed by MKK.

The Electronic General Assembly Meeting System (e-GEM) was developed and launched by MKK on 1 October 2012 as the single electronic platform for general assembly meeting processes in Turkey. e-GEM, is a bilingual, real-time online general meeting management, e-voting and e-proxy platform. The system, for the first time in the world, enables issuers, beneficial owners and proxy holders to manage the whole GM process that starts with notification of shareholders and conduct meetings that are broadcasted live on the same platform. Moreover, through e-GEM shareholders can attend general meetings remotely from anywhere with internet connections by using their e-signatures, assign proxies without any need for granting Power of Attorney and vote on the system's electronic platform in a safe and secure way.

> *"The enactment of the new Capital Markets Law in December 2012 has been a game-changer for financial markets in Turkey."*

e-GEM eliminates manual and costly pre-meeting procedures for issuer companies by giving them the ability to upload electronically signed GM related documents, including convocations, meeting agenda, voting suggestions of board members and proxy materials, to the e-GEM system. Shareholders and intermediary institutions are automatically notified, on a real-time basis via SMS and e-mail messages, upon the posting of documents on the system and have the ability to view and download these documents.

e-GEM facilitates pre-meeting procedures by enabling shareholders to register for GMs and assign proxies using their e-signatures without delivery of any written documents. Assigned proxies are listed in the list of shareholders which is available on the system before the meeting for issuers' access. Registered shareholders and proxies are immediately notified through SMS and e-mail messages.

> *"Borsa Istanbul's partnership with Nasdaq OMX will... foster the development and internationalization of our capital markets and financial market infrastructure."*

Custodians are one of the major beneficiaries of the system. Electronic assignment of local custodians through e-GEM allows them to carry out GM operations for their clients and attend GMs without submitting a Power of Attorney document. Moreover, with the automation that e-GEM introduces in GM related operational processes, custodians can make better allocation of their resources.

e-GEM delivers new capabilities in meeting day procedures by providing sophisticated solutions. The platform establishes a single point of access for investors, thereby enabling them to attend several GMs on the same day. Shareholders and assigned proxies can attend to concurrent meetings simultaneously conducted on the same day on e-GEM.

YAKUP ERGINCAN

e-GEM is fully compliant to regulations such as the EU Shareholder Rights Directive, global industry practices, general meeting standards and corporate governance principles. The system allows shareholders to register for meetings one business day before the meeting date with no blockage of shares. GM attendance and voting rights are determined according to records as of the record date (GMD-1). Once a meeting convocation is made and the meeting documents are posted on e-GEM, investors are instantly notified via SMS, e-mail and ISO formatted messages through SWIFT. The list of attendees containing entitled shareholders and their proxies can be accessed by issuers in an electronic format from e-GEM at 23:59 on the day before the meeting.

| | |
|---|---|
| Total number of general meetings held | 423 |
| Average time of a general meeting | 43 minutes |
| Total number of electronic attendances | 13,602 |
| Total number of physical attendances | 6,228 |
| Number of nationalities for attendances on e-GEM | 41 |
| Maximum number of electronic attendances | 756 |
| Maximum rate of electronic proxy participation | 44% |
| Maximum number of general meetings on a single day | 32 |
| Time for finalization of electronic votes | 10 seconds |
| Number of opinions sent | 241 |
| Number of opposition declarations sent | 228 |

Although not obligated by law, non-listed companies can also use e-GEM in managing their GM processes. In fact, e-GEM was developed as a system that could be effectively used by all public companies in Turkey. The table (above) depicts some statistics for the period October 2012 (launch of the system)-February 2014.

By providing information exchange and exercise of managerial rights on an efficient and safe platform e-GEM will not only increase the level of corporate governance in Turkey but also foster the development of the Turkish capital markets by constituting investor confidence. In fact, e-GEM has increased the number of GM participations by more than 100% in a year, which proves the potential impact of the system. e-GEM is also a benchmark for value-added services that can be developed or adapted by financial market infrastructures all over the world.

## ISS: Is there now increased protection for investors?

The new legislation improves transparency and corporate governance in capital markets and raises the level of investor and asset protection beyond the level of many other advanced financial centers.

MKK has several modules of investor and issuer services that constitute the e-MKK Information Portal in regard to the ancillary duties assigned to it by the new Capital Markets Law (CML). Investors benefit from services of the e-MKK Information Portal with their MKK registry numbers (or the Turkish citizen ID Numbers) and passwords. Non-investing real persons or institutional investors can register to the portal by their e-mail addresses. e-MKK services ensure that end-investors receive all relevant information that flow from their holdings with regard to corporate action events and general meetings.

e-CAS (Electronic Investor Notification and Alert System) is one component of the e-MKK Information platform that brought about an advanced level of investor protection in Turkish capital markets. The system notifies investors against any errors or abuses affecting their securities holdings immediately, and minimizes potential individual or systemic risks. Domestic real investors can receive instant information on securities outflows from their investment accounts through e-mail or SMS by simply registering to e-MKK Information Portal with a valid mobile number and an e-mail address. Other investors can also use this service by registering to the Portal with their e-mail addresses.

Apart from the e-GEM, which introduced effective usage of managerial rights in Turkey ahead of most of the advanced economies, MKK's e-GOVERNANCE (Corporate Governance and Investor Relations) was constructed to establish a high level of information transparency in Turkey. Through the platform, investors can get any information from a single point that is shared by issuer companies on issuer web pages created on the portal, not only for the securities kept in their portfolio, but also on any other securities that drive their attention for investing. Such information can also be requested by the investors via e-mail or SMS. By ensuring better communication between companies and investors, e-GOVERNANCE contributes to better dialogue and more informed voting in corporate governance and thus to increased investor protection. Additionally, the Public Disclosure Platform (which is the main source of information for corporate events, material disclosures, etc. that will be managed by MKK after 17 March 2014) announcements, and statements published by issuer companies to the PDP will be fully integrated to e-GOVERNANCE platform.

MKK is working on e-DATA (Capital Markets Data Bank) project for the distribution of capital markets data which will be sourced from MKK's system and e-MKK Information Portal, and production of data analysis and models thereon for the use of government institutions, rating agencies, and academia. As part of this project, MKK has introduced Investor Risk Appetite Index (RISE). This index is derived by evaluating the weekly changes in investors' portfolios (around 800,000). RISE is calculated for different groups of investors (i.e. domestic investors, foreign investors, domestic real investors, domestic legal investors, domestic funds, and qualified investors) on a weekly basis.

The Turkish Commercial Code Article No. 1524 obliges joint stock companies, which are subject to supervision, to open a website and reserve a part of their website for publishing the announcements obligatory by law. MKK's e-COMPANY (Companies Information Portal) enables companies to publish information and documents initially on the portal, integrate those information and documents with company web sites, provide required security levels, enable access from a single source and consistency, and establish data transmission to the Central Registry Number System (MERSIS) infrastructure. In this way, all documents that companies are required to publish on their web sites are gathered in a single center and presentation of data and information on all companies in Turkey on specific criteria are provided in a safe manner.

*"The new legislation paves the way for the development of the derivatives market in Turkey."*

The new law has also established a new investor protection scheme, the Investors Indemnification Center (IIC), for the compensation of investors for losses suffered due to insolvency of investment institutions. The IIC enhanced the level of protection established by the Investors Protection Fund (IPF), which used to be managed by MKK according to the previous legislation. Currently, the IIC is managed by the CMB and covers financial instrument delivery and cash payment obligations arising from transactions of intermediary institutions for which an administrative liquidation or bankruptcy decision is made. The new scheme covers all capital market instrument obligations besides equities. Furthermore, coverage amount was increased from around USD 35,000 to USD 50,000 per investor.

### ISS: Borsa Istanbul has been formed to replace the old Istanbul Stock Exchange, what are the major differences.

The enactment of new Capital Markets Law in December 2012 has been a game-changer for financial markets in Turkey. With the new law, Istanbul Stock Exchange merged with Istanbul Gold Exchange and Turkish Derivatives Exchange (TurkDex) to form Borsa İstanbul as a joint stock company. However, the transformation from a non-profit structure into a for-profit organization means more than just a legal act. The move is a growth factor on its own and will lead to improved operational efficiency and better corporate governance. The fact that the share of for-profit exchanges in total rose to 74% in 2012 from only 38% in 1998 also clearly confirms the current trend in exchange business.

With merger of separate exchanges, Borsa İstanbul is now a one-stop shop for all kinds of financial instruments and investors have the opportunity to trade in a wide range of products, which include equities, fixed income instruments, derivatives and commodities. Such horizontal consolidation will add to Borsa Istanbul's competitive power at a time when alternative trading platforms, with their flexible structures and high-technology, have started to gain significant market share.

At the heart of Istanbul Financial Center (IFC) project, Borsa İstanbul aims to be the finance and technology hub in the region. Accordingly, it stepped up its efforts to have a solid technological infrastructure and to be more active in broadening its product mix, enlarging its investor/issuer base and developing relations with international exchanges and organizations.

Thanks to the agreement with Nasdaq OMX; Borsa İstanbul, in near future, will provide investors with broadest product mix on reliable and transparent platforms with highest efficiency possible.

There are 421 companies currently listed and yet Market Capitalization to GDP ratio reached only 39% at the end of 2012. Considering the fact that only 127 out of 1000 largest industrial companies in Turkey are listed currently, Borsa İstanbul's focus will be more on blue chip firms which will not just boost the market capitalization of Turkish stock market but also be a role model for small and medium size enterprises. Borsa İstanbul stepped up its efforts in the context of IPO campaign through organized events, on-site visits and media campaigns. Moreover, a new project called ListingIstanbul has been initiated in order to attract foreign companies for listing at Borsa İstanbul. Increasing Market Capitalization to GDP ratio to 70 to 80% levels and the number of listed companies to 1.000 by 2023 are major targets of Borsa İstanbul in this context.

Broadening existing product mix and initiation of new business areas are important elements of Borsa İstanbul's strategic roadmap as well. Fixed income business offers vast opportunities in this respect. In recent years, the new corporate debt issues jumped to USD 29 billion in 2013 from almost nothing. Another line of fixed income business on which Borsa İstanbul aims to show progress is Islamic debt securities. Although it is not a mature business yet, funding needs and large infrastructure investments in Turkey will be the reasons behind the momentum in Turkish Sukuk market in near future. Larger and frequent issuances will also support the liquidity of such instruments at Borsa İstanbul. Options and future contracts based on equities and indices are now traded at Borsa İstanbul platforms, too. The upcoming Turkey Energy Exchange is another line of business. Borsa Istanbul will become a shareholder and the platform operator of energy trading in Turkey. Energy derivatives including electricity and natural gas contracts will be traded in Borsa İstanbul's trading system.

As an exchange which aims to be the technology and finance hub of the region, Borsa Istanbul establishes new relations with exchanges all around the world as well. For this purpose, Borsa Istanbul signed MoUs with various exchanges in Balkans, Central Asia and MENA region. Joint product and technology development schemes, connectivity projects, exchange of personnel, education are major cooperation areas where Borsa İstanbul continues to work and likes to show significant progress in this respect.

### ISS: What is the timeframe for Borsa Istanbul to become a publicly traded company?

IPO of Borsa İstanbul is expected to be completed in first half of 2015.

### ISS: Will the implementation of the CML mean that Turkish capital markets will become more active in the coming years?

The Turkish government and all capital market participants are working on the Istanbul Financial Center Project, which aims to establish Istanbul a regional and international financial center in the coming years. The new CML was aligned with this role and created a foundation for the project. The new legislation, coupled with the strong macroeconomic structure, helped Turkey receive investment grade from international rating agencies after 18 years. These developments were crucial factors behind Borsa Istanbul's historic performances in 2013.

As a market infrastructure institution we are supporting this project by improving the technological capabilities of the settlement and custody system in Turkey in compliance to international standards, regulations (i.e. EU shareholders directive) and best practices. Furthermore, at the moment we are working on opening links with many regional and international CSDs to integrate our markets with the global financial world. Indeed, allowing foreign CSDs to open omnibus accounts at MKK and the related changes in the capital markets legislation is expected to improve the cross-border custody and settlement business in Turkey. New securities will be able to be issued in Turkey by foreign participants in a more efficient way and MKK will be able to provide custody and settlement services for these instruments. Moreover the market for Turkish capital market instruments will gain momentum as international investors' access to our markets will be enhanced.

Borsa Istanbul's partnership with Nasdaq OMX will establish another pillar of the new structure of our capital markets. The partnership will foster the development and internationalization of our capital markets and financial market infrastructure by implementing best-in-class technology.

All in all, the new legislation has constituted;

- Further compliance to EU regulations and global industry standards,
- Improved transparency and safety in domestic capital markets,
- Better investor and asset protection,
- Better corporate governance and closer relationship between company & shareholders,

and these aspects will surely establish more globally integrated and active capital markets in Turkey.

### ISS: Please tell our readers about the Turkish Capital Markets Association.

The Association of Capital Market Intermediary Institutions of Turkey is a self-regulatory organization in the Turkish capital markets. The Association represents all banks and brokerage firms and oversees its members.

The new Capital Market Law, which went into effect at the end of 2012, will broaden the Association's membership structure. With the recent amendments, asset management companies will also become members of the Association, in addition to the current 141 members, consisting of 100 brokerage firms and 41 banks.

The Association's mission is to contribute to the development of a community of professionals equipped with high level of expertise who are sincerely committed to ethical values and perceive competition as offering better products and services to investors. In this regard, various training programs are offered to market professionals. In 2013, 6,000 participants attended the training programs offered by the Association. Moreover, since the last quarter of 2012, the Association has been running a comprehensive investor education program for the public, based on behavioural finance principles.

## ISS: Are new capital market instruments introduced with the new CML?

Introduction of new investment incentives for the population as a whole, expansion of the investor base and diversification of capital market instruments were fundamental issues that were addressed by the new CML. The new legislation paves the way for the development of the derivatives market in Turkey by including derivative instruments in the capital market instruments definition. Articles on establishment of CCPs and trade depositories will further support the development of OTC derivatives market in the future.

The new CML and related secondary legislation also supported issuance of new instruments such as shariah compliant instruments (ijara certificates) and introduced new incentives for investments in pension funds in order to foster the growth of the Turkish capital markets and increase saving rate in the country.

In accordance with the duty assigned to MKK by the new CML, provisions of the Agricultural Products Licensed Warehouse Act. No. 5300 and the e-Warehouse Receipt Regulation which is based on this act, MKK was designated as the Electronic Registry Agency by the Ministry of Customs and Trade for keeping of records on electronic warehouse receipts. Electronic warehouse receipts are created at MKK on behalf of farmers or any institutions that deliver products to a warehouse licensed by the Ministry of Customs and Trade. The records, which are considered as valuable papers, and rights attached on products are held in the MKK system as electronic book-entry records. The service has integrated the financial world and the agricultural world by paving the way for new capital markets instruments (i.e. derivatives products) that will be issued on these electronic receipts in the near future. In 2013, the first electronic warehouse receipts were issued on cotton by a licensed warehouse which became a MKK participant.

## ISS: The partnership with Nasdaq OMX will provide the exchange with state of the art technology, what is the timescale for the introduction of these new systems?

With the agreement, Borsa İstanbul will acquire state of the art technology employed by the leading exchanges of the world and a multi-asset, multi-currency platform, integrated into all post-trade functions, with customary key features such as connectivity and risk management will be in the service of all investors. Borsa İstanbul will also have the right to make changes and improvements on these technology solutions which will enable it to develop and maintain its technology in medium and long term.

The whole system is provided to go live before the second quarter of 2016. The project will be completed in two phases. In the first phase, the platforms for the trading and clearing of cash equities will be delivered. The first phase is planned to finish by the second quarter of 2015. On the other hand, the second phase will include the transfer of platforms for the trading and clearing of derivatives and fixed income instruments. During the whole period, pre- and post-trade risk management tools together with surveillance systems associated with each product type will be established.

# A new era in the Turkish Derivatives Market

**Murat Ulus, CEO, Takasbank**
**Chairman, MKK (Central Registry Agency)**
**Board Member, ECSDA, Board Member, FEAS**

MURAT ULUS

*Takasbank provides clearing, settlement and custody services within the framework of capital market regulations as well as sector specific banking services within the scope of the Banking Law, in Turkey.*

Being the central clearing and settlement house of Turkey, Takasbank's ultimate goal is to contribute to Turkish capital market development through expanding its product and service range. In this respect, Takasbank, in cooperation with its stakeholders and Capital Markets Board, prepared a detailed roadmap to navigate its way to grow into becoming a central counterparty for all organized markets of Borsa Istanbul. As a first step, Takasbank will begin to provide CCP services to derivatives markets as of March 3, 2014.

Although the history of derivatives trading in Turkish capital markets goes back to forward transactions being executed not only in various commodity markets but also in money markets, the first building blocks of organized derivatives market goes back to 1974 when FX operations were allowed by the Central Bank of the Republic of Turkey (CBRT) after the beginning of the demise of the fixed currency of Bretton Woods monetary system based on US dollars and gold and switch to a free floating currency system by 1971. The first swap transactions began to be executed in 1985 between CBRT and corporate banks subject to certain conditions.

| Borsa Istanbul VIOP | 2013 Trading Volumes (USD) |
|---|---|
| Futures | 135,949,679,378 |
| Options | 98,190,147 |
| Option Premiums | 3,133,251 |

In Turkey, on-exchange derivatives trading began with the establishment of markets within the Istanbul Gold Exchange in 1997, the Istanbul Stock Exchange in 2001 and then a specific exchange, Turkish Derivatives Exchange (TURKDEX), was established in 2005 and contracts traded in the stock exchange migrated to TURKDEX platform. As the central clearing and settlement institution of Turkish capital markets, Takasbank began to offer clearing and settlement services to derivatives trades executed at TURKDEX. On December 2012, with the establishment of Borsa Istanbul Futures and Options Market, options contracts in addition to futures began to be traded in the organized Turkish derivatives markets. With the merger of TURKDEX, Istanbul Gold Exchange and Istanbul Stock Exchange under Borsa Istanbul Inc. roof, Borsa Istanbul Futures and Options Market began to execute both futures and options contracts as of August 5, 2013.

> *"2013 was a year of restructuring for Turkish capital markets in line with the new Turkish Capital Market Law."*

| TURKDEX | Trading Volumes (USD) |
|---|---|
| 2005 | 2,257,854,345 |
| 2006 | 12,718,000.334 |
| 2007 | 101,816,132.814 |
| 2008 | 136,655,671.245 |
| 2009 | 224,684,231.884 |
| 2010 | 280,750,511.522 |
| 2011 | 232,833,548.236 |
| 2012 | 227,234,888.881 |

Takasbank has been clearing exchange traded derivatives transactions and managing risk via determining the collateral types and procedures, providing daily mark to market on a customer level, monitoring collateral composition and margin call, managing collaterals in cases of default, providing guarantee fund and cash management as well as member training in both of these markets since their launch, without assuming risk.

| Derivatives Contracts Traded at Borsa Istanbul |
|---|
| **Futures Contracts** |
| - BIST 30 Index Futures |
| - Single Stock Futures |
| - Currency Futures |
| - Electricity Futures |
| - Wheat Futures |
| - Gold Futures |
| - Cotton Futures |
| **Options Contracts** |
| - BIST30 Index Options |
| - Single Stock Options |

2013 was a year of restructuring for Turkish capital markets in line for the new Turkish Capital Market Law enacted as of December 30, 2012. The previous Law dates back to 1982 and the new law harmonizes the regulations with those of the EU and lessons learnt from the 2008 global financial crises was taken into account in the preparation period. In addition to consolidation of TURKDEX, Istanbul Gold Exchange and Istanbul Stock Exchange under the Borsa Istanbul Inc. roof which allows all financial instruments to be traded on a single exchange; post-trade services have also gained judicial grounds. New Law also introduced settlement finality and asset segregation and protection in line with the international regulations which bring trustworthy environment for local and international investors invested in Turkish capital markets.

Parallel with these developments in 2013, Takasbank has also renewed its functions and has started to develop its CCP, trade repository and numbering services. Beginning from September 2013, Takasbank

has been providing full CCP services to Takasbank Securities Lending Market and will become CCP for Borsa Istanbul derivatives market as of March 3, 2014. Takasbank will also be CCP for equity and debt securities markets of Borsa Istanbul, after migration of Borsa Istanbul and Takasbank infrastructure to new platforms which will be developed by Nasdaq OMX Group within the framework of the strategic partnership agreement between Borsa Istanbul and Nasdaq OMX signed in January 2014.

| Takasbank's Major Business Lines |
|---|
| Central clearing and settlement |
| Asset transfer |
| Collateral management |
| Issuer CSD for pension funds |
| Depository for collective investment schemes |
| Local and global custody |
| Cash credit |
| Market operation (security lending, money market) |
| Operation of Turkey Fund Distribution Platform |
| Trade repository services |
| Numbering (ISINs, LEIs) |

Since its foundation, Takasbank has been a gateway between money and capital markets maintaining the robust, reliable and low-cost realization of securities and funds transfer. Starting its operations in 1988 as a department within Borsa Istanbul, Takasbank gained the status of a bank and thereafter started to offer sector-specific banking services to Turkish capital markets in 1996. Throughout years, as the central clearing and settlement institution for organized capital markets, Takasbank enlarged its product range with the banking services comprising of both cash and non-cash credit mechanisms which supports settlement finality. This has not only provided efficacy in both cash and securities transfers but also contributed to the reliable and timely payment of settlement obligations at the value date.

In relation to clearing OTC derivatives; in line with G-20 leaders commitment to improve transparency and regulatory oversight for OTC derivatives markets, Takasbank was authorized as trade repository for leveraged spot FX transactions by the Capital Markets Board and started to provide this services on September 2011. In line, with the global drive to offer trade repository, clearing and risk management services for OTC derivatives trades, Takasbank is working closely with the Capital Markets Board.

Within the framework of Istanbul International Finance Center Strategy and Turkey's 2023 vision as well as G-20 commitments, Takasbank is endeavoring to complete its CCP studies basing on the new legal infrastructure created by Capital Markets Law as well as Regulations on Central Clearing Institutions and Takasbank. The next step as well as the cornerstone for Takasbank CCP studies will be to become a qualified CCP endorsed by ESMA and extend the range of its CCP services from organized markets to OTC markets.

| Takasbank Legal Framework |
|---|
| Capital Markets Law (No: 6362, dated Dec. 30, 2012) |
| General Regulation on the Establishment and Operating Principles of Central Clearing Institutions (dated May 30, 2013) |
| Takasbank Central Clearing and Settlement Regulation (dated July 18, 2013) |
| Takasbank CCP Regulation (dated August 14, 2013) |

In recent years, public policymakers have demonstrated growing interest and concern about the effectiveness of CCP risk management. For financial stability, the CCPs should be designed according to the international standards to ensure that risks are minimized to the largest extend. It is agreed that systemic risk should be reduced and should be better managed. With this standpoint and fully in line with EU regulations, Takasbank is developing its operational and financial infrastructure to be able to fulfill CCP services and is working on a solid risk management framework that will extend its risk management and monitoring capacity which consists of all lines of defenses and relevant stress tests. As part of this, all risk management related matters are being addressed and responsibilities are being redefined. In line with CPSS/IOSCO Principles and EU regulations as well as BASEL III requirements and with the major end-results of investor asset protection, settlement finality and CCP services, Takasbank will offer clearing and settlement facilities in diverse capital market instruments through an effective, cost-efficient, continual and reliable services at internationally accepted standards as well as enhanced IT infrastructure and aim at sustainable customer satisfaction.

Turkish capital markets are on the verge of a new era and benefit from Turkey's large, dynamic economy with increasingly diverse linkages beyond its region as well a favorable macro and fiscal framework and investment grade credit rating. Takasbank is endeavoring to strengthen its place among the capital market institutions in this new era, in order to contribute Turkish capital markets development with a vision to be a trustworthy, effective and innovative institution which provides clearing, settlement, banking and central risk management services at international quality standards, preferred both in domestic and international markets.

# The Implications of New Legislation on the Turkish Capital Markets

**Ozgur Guneri, General Manager, Finansinvest**
**Necla Kucukcolak, Manager, International Market, Takasbank**
**Gunsel TOPBAS, PhD, Head of Middle East, Pakistan, Turkey, Direct Custody and Clearing, Assistant General Manager Securities Services – Citibank A.S.**
**Ibrahim Yurtlu, Manager Securities Services, HSBC**

*ISS Mag talked to some of the key players in Turkey's bid to become a leading centre for financial services.*

> *If the same law had been passed a decade ago when the real interest rate was 10%, it probably wouldn't have had much impact.*
> **Ozgur Guneri**

Turkey's new Capital Markets Law is a key element in that country's ambition to become a leading centre for financial services. The implications of the legislation and other associated developments were discussed in a meeting with ISS Magazine Managing Editor.

Capital Markets Law No. 6362, which entered into force on 30 December 2012, was designed to provide a framework for deeper and more liquid capital markets by enhancing investor protection and harmonising Turkish capital markets legislation with EU rules.

The most obvious effect of the new law was the creation of a new securities exchange, Borsa Istanbul, to replace the Istanbul Stock Exchange. Other notable changes were the introduction of a new prospectus review process similar to that used in the EU where a prospectus is submitted for approval by the Capital Markets Board (CMB) before capital market instruments can be offered to the public or traded on a stock exchange and strengthened investor protection in the form of expanded disclosure agreements and increased liability for inaccurate or misleading information or omissions in disclosure documents.

**Ozgur Guneri**, General Manager, Finansinvest observes that he has analysed the Turkish market in the context of other capital markets and hopes that the new law will be the first step towards significant growth.

"When we analysed other markets there were two common factors – lower interest rates and policy maker intervention. Where the interest rate is lower than the rate of economic growth, investors derive less income from interest rates than investing in capital markets. The second factor is where the policy maker intervenes in the market to a significant level, usually through financial reform."

Turkey currently experiences similar conditions in that the interest rate is lower than the real rate of economic growth and regulators have made a significant intervention.

"These two factors will hopefully fuel capital market growth," says **Guneri.** "That is why the new law is very important, in terms of timing as well. If the same law had been passed a decade ago when the real interest rate was 10%, it probably wouldn't have much impact. With current conditions I believe the new law will pave the way for new products

NECLA KUCUKCOLAK

and new ideas, or at least will enable us to reach international standards, so I am very optimistic about next year and beyond."

When asked to outline the key differences between the Istanbul Stock Exchange and Borsa Istanbul, **Necla Kucukcolak**, Manager International Market, Takasbank refers to planned further developments such as the establishment of a separate energy exchange.

"There is also talk of a commodity exchange, but that would be a longer term project. The operator of these exchanges would be Borsa Istanbul, which would also have a share in these exchanges and would be on the board of management."

Borsa Istanbul is working on a strategic partnership as part of the longer term objective of becoming a publicly traded company, he explains. "One other important development is becoming a de-nationalised system. There was confusion in the past over what kind of institution the exchange was - it could have been described as a public company, state owned, semi-state owned or even private. I think this is now clear and as a result it has more ability to take action and move forwards."

In December, agreement was reached between Borsa Istanbul and Nasdaq OMX for the latter to take an initial 5% equity stake in the exchange (with an option to increase this by an additional 2%) as well as provide technology and advisory services.

**Gunsel Topbas,** PhD, Head of Middle East, Pakistan, Turkey, Direct Custody and Clearing, Assistant General Manager Securities Services – Citibank A.S. said that local institutional investors are at infancy stage for equities with high growth potential.

"A decade ago there was no pension fund industry in Turkey, but in the future, local institutional investors, including pension funds will be a big contributor to the volumes and the size of the market. Currently about two third of investors are foreign institutional investors, with the remaining 35% accounted for by local retail investors. This will change and it is expected that the share of the local institutional investors in Turkish capital markets will grow at a great speed; as also supported with the new legal framework in the market.

He also mentions that the growing transaction numbers in the market prove that there is continued interest by foreign investors. "Transactions (and therefore volumes) are steadily increasing".

This is a liquid market, one of the most liquid markets and will continue to be so over the next few years. I think one important factor that has not been yet benefited the market is that in May 2013, Turkey became investment grade. We should expect that this will be another element to contribute to higher volumes and increased interest from foreign investors, especially on the sovereign side."

**Ibrahim Yurtlu**, Manager Securities Services, HSBC accepts that some of the banking regulatory agency's rules are not entirely

IBRAHIM YURTLU

GUNSEL TOPBAS

> *"This is a liquid market, one of the most liquid markets, and will continue to be so over the next few years."*
>
> **Gunsel Topbas**

compatible with what the capital market world is trying to achieve. "Because cost has been quite an important part of doing business, obviously you try to find a way to increase operational efficiencies. But you have barriers, so you say, 'Okay, you have to be here. You have to be present here.' If you have the ability to manage your costs in a better way then you should be taking care of your operations, whether it is in Istanbul, Cairo or somewhere else. I think the banking authority should be more in line with what the market is trying to achieve – at the moment there is a mismatch."

Reference was made to two major changes, one on the asset management side and one on the broker firms side.

"In the past life insurance companies, banks, intermediary or brokerage companies were allowed to set up funds, but under the new law only asset management companies will be able to do so. The legislation will be effective from 1 July 2014 but there is a one year transition period, so hopefully on 1 July 2015 all fund issuers will become asset management companies.

"On the brokerage side there are roughly 100 brokers in Turkey and the regulator believes that number is too high. Investment firms or brokerage businesses are very capital intensive, so you cannot just be in the market with five people and very limited capital. These companies will either grow their business or go out of business.

"The other factor to take into account is that from 1 July 2015 it will not be permissible to communicate with an investor on a one to one basis or command them to buy assets. An investment advisory agreement will be required together with the appropriate licence. This will significantly affect the way banks operate from the financial products perspective and will bring significant changes from the distribution side as well."

It was suggested that investors didn't need asset managers in the past because they were investing in Turkish bonds and making good returns. "This is not the case anymore so there is a need for asset management and for seeking yield elsewhere."

In a speech at the general assembly meeting of the Association of Capital Markets Intermediary Institutions of Turkey in December, chairman Attila Koksal referred to the updated Capital Markets Law and the re-structuring of the exchange as key stages in the development of Istanbul International Financial Centre (IIFC).

By 2016, the Turkish government hopes that the head offices of the country's financial market governing bodies, state-owned and private banks and related businesses will be located at IIFC.

The panel were broadly optimistic about the country's potential as a financial centre and particularly a centre for Islamic finance, suggesting that the necessary regulations and infrastructure are in place and that MKK (Merkezi Kayit Kurulusu - the central securities depository for dematerialised capital market instruments in Turkey) was setting a benchmark for other jurisdictions.

There are a few clauses in the new law that set the stage for collateral management closer to what investors would expect in more developed markets. The panel discussed the value of increasing confidence in investor protection and simplifying the process of new product development through the integration of the derivative and cash markets, which will benefit retail investors.

There was also reference to the increased importance regulators are giving to institutional investors. "Turkey has been focusing more on protecting retail investors. Now the regulators - as well as the exchange - have realised that without a good institutional investor base it is not possible to increase volumes, investments and savings."

However, there was also an acknowledgement that further developments were required. "For example, high frequency trading and electronic trading is not something we can really offer now. We have very big clients and we are not capable of getting new clients in, because the system is still very slow compared to internationals standards" was one of the concluding comments.

# The Utility of Trade Processing

**Darryl Twiggs,**
**Head of Product Management, SmartStream**

DARRYL TWIGGS

*Trade process management needs rapidly-processed, easily-distributed data; that requires a considerable change for many financial services firms.*

> *"By evaluating where the bottlenecks are in the trade lifecycle, a smart business can identify the true cost of failure."*

Banking operations are going through a revolution. Banks have to reduce costs substantially, cuts of anywhere from 50% to 70% of their current spend. To achieve this is not a case of automating any single process or capability, they need new ways of operating. They are also under pressure to rationalise their solutions landscape in order to better deliver joined-up, intraday analysis of their positions. Demands of customers and regulators have shown the flaws in the siloed system, batch-processing models for trade process management that have traditionally been used.

What banks now want to see is a single, cross-asset class provision that can lower costs and push data out to their client-facing portals, in a way that surpasses anything that their current technology base enables them to do.

For example, over the last 18 months there has been a growing demand for validation of pricing and market values, from a reconciliation point of view. Providing traders with true value is something that regulators want to see, but also tackles the sensitivity on risk that banks increasingly feel.

That is a challenge for firms that do not have full reconciliation solutions. The halfway house of a matching system can spot a problem, but then leaves the firm to deal with that problem. A reconciliation system should be able to deal with those consequences in terms of checking against the fund, the portfolio, the account, and then looking at the complete movement of currency and securities over that portfolio or fund. To do that requires a multi-asset class solution.

Historically these platforms, including traditional transaction processing systems, have been built on a restricted set of asset classes. To cope with the new demands, businesses are now trying to bend those systems to do more than they were designed to, rather than replace them.

## Drivers for change

Regulations are imposing huge numbers of new control points on financial operations. Banks motivated by regulatory pressure are often looking for a solution to process over-the-counter (OTC) derivatives because of Dodd-Frank or the European Markets Infrastructure Regulation (EMIR) or to cope with the reporting requirements of the Basel III capital adequacy rules. One of the requirements under Basel III is to be able to deliver stress testing, however if the bank's data is in 30 different systems, there is no way to do that. These are pushing banks to look at using a single trade data repository.

Others are looking for a single repository as a consequence of rationalising their landscape of 10 or 20 different solutions that are supporting siloed lines of business. A single platform is often the only way to tackle the multiple issues that a technology sprawl creates. Banks are under increasing pressure to reduce their operating costs and it is can be expensive to support any solution; as a consequence they are looking to cut their support costs, to rationalise the licences they hold for different solutions, and to reduce the number of people that are needed to operate those systems and maintain them.

Tightening the belt by so many notches at once has led to a complete change in the paradigm in the back office in the last 12-18 months. There has been a move towards the utility model of technology provision, with horizontal IT layers across the back office and a reconciliation solution which provides a utility service to multiple lines of business. That presents a challenge because the lines of business have traditionally been managing this aspect themselves, dealing with the prime data. Now they not only have to put a reconciliation service in place but also an exception management layer, which is the interface to those lines of business, engaging them in transactional operations.

Tier One and Tier Two banks are moving into that space rapidly, giving them the opportunity to decommission silo- or asset class-specific solutions. Some banks are looking to outsource the whole operation. This model had been pushed unsuccessfully in the late 1990s and early 2000s by custodian banks. Now independent companies such as Accenture are providing a lift out of those back-office operations. SmartStream is engaged in one of these operations with Accenture, in the Accenture Post-Trade Processing (APTP) solution, where it provides all of the transaction servicing as a utility.

## The utility of utility

By evaluating where the bottlenecks are in the trade lifecycle, a smart business can identify the true cost of failure. However, increasing demands for visibility across the whole lifecycle of the trade are impossible to meet for banks that have got different systems processing different stages of the lifecycle. Where there is an exception downstream, firms want to see the whole upstream lifecycle. That means being able to see the instruments, the confirmation, the affirmation, settlement instructions, settlement instruction advice, payment advice and payment itself all in one place. Increasingly there is a requirement for heuristics-based solutions, which can identify patterns and common sources of error.

This insight is crucial if firms are to avoid making simple judgements and thereby simple mistakes. For example, as a firm goes through the rationalisation of process flows, it might identify a solution as being slow, when in fact it is the Extract, Transform, Load (ETL) layer that is supposed to enable data delivery, that has had a problem, and so data has not been delivered to a system. Only through a heuristic capability to do that analysis can a bank have the opportunity to identify such an issue.

The other big challenge when managing multiple solutions and dealing with customer data, is the accurate alignment and reconciliation of that data. In the securities world there are traditional industry standards of coding conventions whether it is the Committee on Uniform Securities Identification Procedures (CUSIP) number, Reuters Instrument Code (RIC), International Securities Identification Number (ISIN) or Telekurs number.

Wedded to this, customers each have their own versions and when a bank is dealing with external parties who are using totally different symbologies it faces a major challenge. Banks are having to invest huge amounts into ETL solutions to manage this issue, until an introduction of greater standardisation comes in. Individual reference data / static data solutions have their independent models and trying to rationalise those is an impossible task.

The new paradigm provides an answer to these challenges, as reference data and securities data is held in a single master outside of the organisation. Smartstream's reference data unit has partnered with Euroclear to provide a central data utility. The idea is to take the utility model from processing information and creating a mutualised source of data. Banks who are clients of Euroclear are taking Smartstream's clean data, so they all have and use the same data.

Mutualising that information via a single source, rather than independently provides huge cost savings. With ten parties dealing with the same data there are fewer exceptions, and there is the opportunity to lift out the whole securities support team.

Banks are having to provide intraday data to their clients, because to those clients liquidity is also an issue. In order to do that, the upstream systems also have to move to an intraday process; general ledger systems are having to provide intraday data on settlement where traditionally they were overnight batch-based. Banks must be able to look at liquidity or funding at the individual transaction level and provide that data to the bank's customers so that their liquidity is monitored.

> *"A single platform is often the only way to tackle the multiple issues that a technology sprawl creates."*

Current technology trends are facilitating this change. Software-as-a-service (SaaS), cloud computing and distributed software solutions all support solutions irrespective of location and that gives the technology providers and therefore clients the opportunity to work at a lower cost base. By providing the capability to respond dynamically with processing power, the need to overcompensate for capacity ahead of time is reduced, thereby removing the an expensive fixed cost from the equation. New technology is web-enabled so it can be deployed on the web at zero cost. The location of a processing hub is flexible, which can allow multiple users to take advantage of lower resource costs geographically.

## Timing is everything

Moving from a batch-based process to intraday is a complete step change, and it is not a purely internal issue. There is a broad move to an intraday liquidity risk model.

New utilities are coming to the fore, particularly in the US, where futures commission merchants provide intraday liquidity to their customers as a standardised process.

Ultimately this is an issue of risk. Bank clients need to know what their liquidity positions are, what their funding positions are, where they can best take advantage of changes in markets or get out of markets. They can only do that if they have a back-office process that is flowing intraday. The old paradigm of operating on an overnight batch process represents the technology of 40 years ago and the world in which it existed. An ordinary person's day-to-day life is reflected very rapidly in the way that large institutions have to operate; in the modern business environment that means intraday, web-enabled, joined up information.

# Challenging the Status Quo to Overcome Outsourcing Obstacles

**Hugh Cumberland, Solution Manager, Financial Services, Colt Enterprise Services**

HUGH CUMBERLAND

*"In this world nothing can be said to be certain, except death and taxes", famously remarked Benjamin Franklin in 1789. For those of us working in the world of financial services today we could quite fairly add "outsourcing" to that very short list.*

Application systems and operational functions have often been outsourced, particularly for non-core activities and where economies of scale created financial efficiencies for all parties concerned. Typically these areas of outsourcing have been limited to peripheral activities. But the crash of 2008 has brought operating costs into sharp focus. Squeezed margins and constrained capital availability have necessitated a rethink on the sacred cows that have not previously been candidates for outsourcing.

> *"Squeezed margins and constrained capital availability have necessitated a rethink on the sacred cows that have not previously been candidates for outsourcing."*

## New candidates for outsourcing

Firstly, in the area of applications, the emergence of outsourced private virtualised resource pools has created new opportunities to cut and control costs – both direct and indirect. The only barrier to leveraging these new opportunities seems to be trepidation. Which applications can be outsourced, what about security, compliance, regulation and control? To avoid dithering, determine which applications are absolutely not available for outsourcing (for whatever reason). Prioritise what's left by "bang for buck" and ease of transition, then work through the objections one by one. If perceived obstacles evaporate under close scrutiny then the application in question can be fast-tracked for outsourcing. If obstacles remain determine – are they temporary or permanent? If temporary (e.g. awaiting cloudification) then put on hold and re-visit frequently. Remember that outsourcing has been with us for a long while, and from a regulation, compliance, security and control perspective, utilisation of private virtualised resource pools does not present a materially more challenging scenario than outsourced hosting in a co-location venue.

Secondly, many financial services firms are starting to re-visit the concept of outsourcing operational functions – and not just the applications but the people and procedures that go with them too. The same vigorous and robust approach should follow. Does the function really need to be under your direct control, using your headcount and facilities in your office space? Does it really differentiate? Could an outside body do it equally well for your firm and your competitors, at a cheaper unit price, with no loss of customer service or competitive position? Many such functions have long been considered core competences that differentiate and cannot possibly be outsourced. Challenge the status quo. Is that really the case? A lot of banks, brokers and custodians seem to be replicating the same tasks in a way that does not appear particularly differentiated. While it is easy to imagine that functions such as pricing and P&L analysis are not something most firms would want to be outsourced, can the same be said of all aspects of corporate actions processing? Or static data management for non-proprietary data? Historical storage of public domain data?

## What happens if there isn't anybody to outsource to?

Where financial services firms have refused to outsource in the past, it's entirely possible that there might not be a provider for certain services. But the absence of a service provider is not always a complete barrier. Banks and the like should get together and approach existing service providers to ask them about taking non-differentiated processing off their hands. Failing that, create a jointly-owned (and carefully managed) utility, bearing in mind that existing utilities should not be expected to be all things to all people, nor providers of systemic or over-concentrated risk.

When it comes to considering outsourcing – whether at an application or function level, be bold. Challenge the status quo. Collaborate with competitors where it makes sense. Make sure that vested interests don't impede progress. Identify non-performing assets (e.g. under-utilised data centres, proprietary disaster recovery facilities), and then plan to eliminate them. Engage the regulators when trying to grapple with the challenges of marrying compliance and outsourcing – they'll be pleased to see financial firms making better use of capital, and controlling operating expenses.

## Best practices for finding an outsourcing provider

**1. Shortlist providers – do they have domain knowledge?**

**2. Audit their capabilities and claims – do they stack up?**

**3. What accreditations do they have (e.g. ISO, Up Time Institute etc), are they current and do they cover the facilities/resources in question?**

**4. Ask for references…and make time to have an in-depth conversation. Ask for a site visit – does it come up to your expectations? Does it feel right?**

**5. Ask for a draft transition plan – if they don't have one to hand, have they done this before?**

**6. Select and negotiate – what protections, guarantees and SLAs do you want? Be sure that you are making the savings you expect but are also making it worthwhile for your supplier to give you a good service.**

# The Luxembourg Fund Industry – Looking Ahead In 2014

**Josée-Lynda Denis,**
**Chair of the ALFI TA and Distribution Forum**

JOSÉE-LYNDA DENIS

*As we look ahead to 2014, alongside the financial crisis over the last few years, the Luxembourg fund market has continued to grow, with the TAs riding along to support its ever expanding global distribution landscape.*

The following numbers confirm this statement (as at end December 2013):

- AuMs totaled **€2,615.4bn**;
- Of the **€193bn** of net sales across the European fund industry in 2013, nearly 50% of all net subscriptions were for Luxembourg funds;
- The number of funds and sub-funds increased slightly over the year with **3,902 funds and 13,685 sub-funds**.

These figures do tell a compelling story, however, there are ongoing threats and challenges for the sector as the regulatory agenda remains charged and threatening and the competitive market is growing with foreign markets wanting to also position themselves as fund centers of excellence.

> *"Luxembourg UCITS have more than a 24 hour cycle, with the ability to be traded from the opening of the Asian markets, to European markets to the closing of the Americas market in a given day."*

## TA Luxembourg – the *Follow the sun* model

The 13th edition of the *International Transfer Agency Summit* is taking place once again in Luxembourg. As a global fund distribution platform, "International" certainly rings true to Luxembourg TAs. It is part of their DNA, particularly of those who support a global cross-border TA platform.

Over the last 12 years, Luxembourg TA providers have established dedicated TA servicing regional hubs in Asia, Americas and Europe to support the increasing complexity of fund distribution, adhere to local market practices and facilitate the operational access to the Luxembourg funds.

With Luxembourg funds distributed across the globe and the increasing regulatory focus on investor protection and transparency, the TAs are at the forefront of the regulatory and market challenges and are ideally placed to enable Global Asset Managers to navigate and succeed in their asset retention and asset growth strategy across the globe.

Over the past few years, TAs have adapted their operating models to provide efficient support and deliver innovative solutions for UCITS IV, RDR, AIFMD and now FATCA. Market developments such as Target 2 Securities, are also pushing for more efficient cross-border transactions and settlements. In addition to the evolving regulatory and market developments landscape, investment managers are targeting growth in more countries through ever increasing and diverse distribution channels.

Thanks to these developments, Luxembourg UCITS have more than 24 hours cycle, with the ability to be traded from the opening of the Asian markets, to European markets to the closing of the Americas market in a given day. This makes the Luxembourg fund, a unique vehicle for the distribution of investment strategies across the globe – a true Follow the Sun global fund distribution model.

## Asia – a UCITS model taking shape from East to West and West to East…

Global Asset Managers and service providers continue to focus on Asia as the region grows and expands at a terrific rate in terms of economies and in particular, the asset management industry.

Luxembourg UCITS, a recognised brand in Asia, is thus in a privileged position from a "cross-border" fund distribution perspective, nevertheless, in anticipation to three major Asia fund industry developments over the next few years:

- **China/Hong Kong Mutual recognition**
- **ASEAN fund passport** (Singapore, Malaysia, Thailand)
- **APEC fund passport** (Singapore, South Korea, Australia, New Zealand)

Today, Luxembourg intends to even further develop its position in this region. Alongside its UCITS, Luxembourg has been exporting its cross border fund operating platform, methodologies and fund industry endeavours. For instance, ALFI established a representative office in Hong Kong in 2010 to support local Luxembourg UCITS' interests; the association has also set up the ALFI TA & Distribution Forum Asia working group. Furthermore, the ALFI roadshows now include roundtables dedicated to Operations subject matters.

One of the latest fund industry trends is "East moving West". Most of the major Chinese banks now have their European headquarter in Luxembourg. The first Luxemburg RQFII was authorised in November 2013. The major jurisdictions in Asia have developed local registration and approvals based on the local and regional markets, and have begun to create their own regional fund passports, prompted, no doubt, by the success of the UCITS product.

With the three different types of fund passports being developed in Asia, all of these are at different stages of realization. However, a few questions remain. Will they sit side-by-side to the UCITS products, or will they replace it? Will there be mutual recognition of UCITS funds as well as Asian pass-portable funds?

At the moment, there are more questions than answers. Nonetheless, at ALFI, we believe that by working together with the Asian regulators, producers and suppliers, we can have a mutually successful future.

# A Summary of the Collateral Management Session at the ISS MAG Summit 2013

FOUAD ESTEPHAN

**Panelists:**

**Fouad Estephan**, *Director and Senior Product Manager,* Euroclear's Collateral Management and Financing Services

**Mathew Keshav Lewis**, *Vice President,* Strategy & Business Development DTCC

**Anthony Carey**, *Executive Vice President,* State Street Corporation

**Ewen Crawford,** *Global head of Collateral Management,* Nomura

Maximising the efficiency of collateral, optimum margin call frequency and the likely impact of regulation were some of the key issues discussed during the collateral management session of the third annual ISS Magazine Annual Post-trade Technology Summit.

across multiple service providers - be that custodians, central securities depositories (CSDs) or international central securities depositories (ICSDs).

**Mathew Keshav Lewis**, Vice President, Strategy & Business Development, DTCC suggests that the speed with which collateral can be moved or applied from one location to another is also vital. "Every custodian and collateral management platform faces this connectivity challenge. It almost doesn't matter how much collateral is moving, but rather the velocity at which it moves and the number of transactions that are there to support it."

The question of whether the proposed European financial transaction tax (FTT) would affect the speed of collateral movement was taken up by **Anthony Carey**, Executive Vice President, State Street Corporation, who referred to some slowdown in the momentum behind FTT.

> *"If we look at the level of margin calls broadly within stressed periods, the volume doesn't change....daily variation margin calls has broadly existed in OTC for a decade."*
>
> **Ewen Crawford**

> *"You are going to have multiple sources looking for the same quality assets to act either as collateral or a liquidity buffer."*
>
> **Anthony Carey**

Actions taken by regulators in relation to liquidity risk management and the push for OTC derivatives to be centrally cleared have been widely debated. **Fouad Estephan**, Director and Senior Product Manager for Euroclear's Collateral Management and Financing Services observes that initial concerns over an asset collateral 'crunch' have abated.

"Central banks can play a role in providing other types of collateral that can be accepted by counterparties and regulators can change their rules. Suddenly firms realised that fragmentation of the pools of assets was the challenge."

The issue is that firms not only hold their assets in different geographical zones but also

"However, the group of nations behind the proposed tax [known as the EU11] do seem to be moving towards some degree of consensus on the repo side. Some commentators are saying that if FTT goes through the repo market will dry up, so there is recognition within the EU11 that there is going to have to be some focus on the money market-type instruments and some accommodation made there."

But according to **Estephan**, simply mobilising assets is not enough. "Even if you bring the assets to the place they should be in order to be used as collateral, you have to optimise their use. So when firms consider the attributes of a service provider, the main one should be a holistic view of assets. Typically, this would also address the cost of funding issue because the better you can use the pieces of assets between the different counterparties, the more you can reduce your cost of funding."

An issue that concerns **Carey** is the focus on collateral as it relates to derivative transactions and clearing. "One of the things we also need to keep an eye on is the unfolding Basel III requirements, especially when you look at how they are going to apply to some of the largest banks in terms of liquidity ratios, etc. You are going to have multiple sources looking for the same quality assets to act either as collateral or a liquidity buffer."

When asked whether the market is not already ahead of regulation in terms of self-determining the viability and sustainability of its counterparties, **Ewen Crawford**, Global Head of Collateral Management, Nomura, suggests that some changes represent an alteration of form of essentially the same risk model.

"If we look at the level of margin calls broadly within stressed periods, the volume doesn't change. There was a regular and active collateralisation and margin process in place and maybe as we move down the curve that process picks up in stressed times, but daily variation margin calls has broadly existed in OTC for a decade."

MATHEW KESHAV LEWIS

> *It almost doesn't matter how much collateral is moving, but rather the velocity at which it moves and the number of transactions that are there to support it.*
>
> **Mathew Keshav Lewis**

The panel was then asked to consider whether clearing houses could (or should) move to margin calls every 15 minutes over a 20 hour period.

Not without a considerable amount of coordination, suggests **Keshav Lewis**. "Firms would need highly standardized processes and procedures across their entire operational footprint to meet this kind of time frame. Thankfully floating this concept now gives institutions time to consider the implications, the industry standards and the operational changes required."

**Carey** asks why a clearing house would want to move to such frequency of margin calls. "I am sure there are a lot of people who could argue the justification for that, but even in a highly stressed market do you get to a point where the significance of change would actually justify such frequency? Should that happen the only way one could deal with it is through moving towards standardisation and reputable operational process."

**Crawford** reckons the market is "not a million miles away from that process today" in terms of intraday calls but accepts that getting the right asset to the right place on an intraday basis raises the stakes around operational challenges.

**Estephan** is more welcoming of this potential change. "We have a process that is fully automated because we are using the assets that sit on our books and can cope with this type of frequency thanks to the model that we have in place. Technically and operationally everything is possible if you are in a closed environment and that is the point of tri-party agents."

On the question of which regulation is causing most concern, **Carey** refers to the potential impact of the new European securities settlement engine T2S.

"I really think it is going to have a significant impact from the global custodian to the sub custodians to the CSDs. Security settlement is going to become a commodity and then what we are going to have is what was there before the distinct lines between the CSD and the custodian around asset servicing started getting blurred. We are going to see the CSDs come further up the value chain in looking to provide services in that area.

"Each custodian will be looking at having their own participation account because of the benefits of centralisation and also efficiency on the cash pooling side. There will be more of a focus on custodians (at least in the bigger markets) doing self-custody - I think they are going to move away from being 100% focused on the sub custodial agent. There is also going to be some consolidation of the smaller markets where custodians are going to pick agents who can go across a number of these individual markets."

independent amount of initial margin and the bilateral posting process.

"There is the potential for a hugely painful repapering process across the whole of our OTC master client set. There is also the risk (or possibly opportunity) that regional regulators will take the IOSCO paper and interpret it in subtly different ways, creating regulatory arbitrage. There are possible drivers to a more standard CSA-like model, which is actually more efficient from a cash perspective, but probably where there are ten, twenty times more calls."

The discussion then moved to consolidation and the fact that one of the difficulties facing the utilities serving custodians is that they have volume at one end for which there may be a slightly different pricing to the very low volume at the other end, which creates a challenge around fee structures.

When asked whether AIFMD and depository liability were concerns, **Carey** says that they are not necessarily new issues to be considered. "Obviously AIFMD has been here a while and each custodial bank has deliberated as to how it is going to address this. For some it is a combination of getting more active in terms of self-custody in markets as opposed to being one step removed from the CSD, while others are very much focused on the application of oversight policies such as they have had with network management, applying them to quasi-sub custodial agents like brokers."

He concludes that most market participants have identified how they are going to go

> *I really think …T2S.. is going to have a significant impact from the global custodian to the sub custodians to the CSDs. Security settlement is going to become a commodity.*
>
> **Anthony Carey**

about addressing these issues, while adding that those who haven't will have problems. "What would be a concern is to make sure that there is recognition as to what is a reasonable cost to pay to your custodian for that additional responsibility and that we don't get a race to the bottom in terms of fees. I think that is the danger at the moment."

**Keshav Lewis** adds that T2S is seeing some custodians consider becoming CSDs and also has CSDs thinking about offering traditional custody services and even administrative services.

"It has local custodians thinking about their own jurisdiction, so you end up with a very significant threat of fragmentation which locks collateral into a given jurisdiction and makes it much more challenging to mobilise it when required."

Specifically in the sphere of OTC collateral (and not withstanding elements moving to clearing), **Crawford** is exercised by the International Organization of Securities Commissions (IOSCO) paper on segregated

ISS MAG Summit 2013

# A Report from the Developments in Messaging Panel

CHRIS PICKLES

**Panelists:**

**Martin Sexton**, Principal Consultant London Market Systems

**Fiona Hamilton**, Vice President Emea Volante Technologies

**Paul Taylor**, Director Global Matching Swift

**Chris Pickles**, Head of Industry Initiatives, Global Banking and Financial Markets Bt

**Tim Fox**, product Manager, Avox

> *It is a strange environment when you consider that we have had exchanges for 500 years and we still haven't got to the stage where they are doing something as simple as sharing the same technology approaches.*
>
> **Chris Pickles**

The importance of a single messaging standard and the desirability (or otherwise) of introducing new standards were two of the main subjects of debate during the developments in message session of the ISS Magazine Annual Post-trade Technology Summit.

The question of whether new standards are necessary to increase affirmation rates – or whether that objective could be achieved through wider adoption of existing standards – is a frequent topic of conversation at industry events.

**Martin Sexton**, Principle Consultant, London Market Systems, refers to the 2008 investment roadmap (a collaboration by Financial Products Markup Language/International Swaps and Derivatives Association (FpML/ISDA), Financial Information eXchange (FIX) protocol Ltd (FPL), the International Securities Association for Institutional Trade Communication (ISITC) and Society for Worldwide Interbank Financial Telecommunication (Swift)) as a basis for industry collaboration.

> *Trades.. fail because there is something fundamentally wrong with the way the trade has been booked, producing a difference in date or quantity.*
>
> **Paul Taylor**

"I think it provides an opportunity for new organisations coming into the industry to deploy those standards. You will find some of the banks in eastern Europe, for example, adopting industry standards more openly than in the mature markets."

However, **Fiona Hamilton**, Vice President EMEA Volante Technologies is less convinced of its value. "I think the reasoning behind the roadmap was very good. One of the reasons it has tailed off a bit is that most of the people that work on the FIX protocol or FpML have day jobs and sponsorship of such initiatives has declined. Also, in all my years in standards there has been a 'my standard is better than your standard' attitude."

PAUL TAYLOR

Affirmation differs dependent on segment and asset class - certain parts of the industry are better at affirming trades than others, says **Paul Taylor**, Director Global Matching, Swift. "If you look at hedge funds as an example, they are not particularly progressed in terms of affirmation of cash equity trades, whereas for asset classes where you are mandated to try to electronically confirm trades you will find affirmation rates start to increase, or perhaps they are already pretty healthy."

A standard is more than just a messaging standard; it is a business standard that has to be related to the process, he continues. "Education is great in terms of making sure that new users have a roadmap to work from, but we need to try and move that and educate people in terms of the benefits they get from the standardisation of business process, not just messaging."past

**Chris Pickles**, Head of Industry Initiatives, Global Banking & Financial Markets, BT is convinced that additional standards are not required and supports the use of ISO data standards where possible. He also dismisses the notion that FIX is about pre-trade equity. "That is one thing it is used for but firms around the world are using it across all asset classes, right the way through to clearing."

According to **Hamilton**, the syntax of what you are communicating should not matter. "The real issues about whether it is affirmation rates or settlement failures or anything else are the quality of the data and being able to get the data and communicate it. The reason things don't get affirmed or settlements fail is not because of people - it is usually because you don't have the information to send the affirmation details at the point where you need to do them. It is about taking all that data and integrating it into a chain. The problem is, can you get all of that information from the disparate trading systems, order management systems, etc.?"

Trades don't fail because you have a different message standard - they fail because there is something fundamentally wrong with the way the trade has been booked, producing a difference in date or quantity, says Taylor.

"The problem with using multiple different protocols from a bank or community perspective is that you have to have lots of

FIONA HAMILTON

> *In all my years in standards there has been a 'my standard is better than your standard' attitude.*
>
> **Fiona Hamilton**

different technology handling all of these different elements. Obviously there are some people in the community that provide technology in order to get around that problem, but I would argue that there is potentially a barrier to entry problem in terms of people using different standards, models and processes. I think it comes down to a desire to invest and if you are going to invest then you just need to decide in which way."

Front, middle and back office have hugely different pressures of latency, Hamilton adds. "If you are trying to trade you really don't want to have messages that are twenty times bigger than they need to be because they have to be binary, encoded etc. In an ideal world it would just be one standard that does everything, but there are reasons why people come up with different standards - they see a deficiency. If it was only about adding more information, you could infinitely change your ISO 15022 messages to have as many fields and subfields as you wanted. That is not why people create standards; it is usually to address a particular need in an area like latency."

The panel were then asked how institutions can use existing standards across their organisation to improve their internal STP rate - the concept of one computer system being able to speak to another owned by the same organisation.

"I think the unfortunate fact is that there has been so much expansion and acquisition over the years at banks that you very likely have a whole bunch of systems layered on top of one another," says **Tim Fox,** Product Manager, Avox. "At banks where I have worked we have had as many as 230, 240 different systems hooking together in some way. A large proportion of investment budgets is being sucked up by regulation and unless the bank has a different way that I can't think of in terms of being able to combine all of that systemic infrastructure, they are going to have to live with it until they can get some budget to start system consolidation."

**Taylor** observes that most of the financial institutions he has worked at have gone down the FpML route. "Others have used ISO 20022 and the fun starts when you have one part of the organisation using FpML and the other using ISO 20022. One of the things I have come across at all the institutions that have gone down that standards route is an extension mechanism so that built in to the standards are effectively covert channels."

"What tends to happen is that a lot of the developers can't necessarily develop their feeds because the data dictionary is not properly documented, so they dump the piece code into an extension mechanism within the standard. One of the things I would like to see from all industry standards (including ISO 20022) is two 'flavours' - one with the extension model assuming cleansed data and a second with no extension mechanism designed within it, as something that actually allows you to do proper validation."

**Hamilton** reckons the application vendors, the people who are supplying order management systems, trading systems, portfolio management and settlement systems need to be as open as most of the standards bodies are about how their data looks.

"Tell us what these data elements are like, which then should (in an open community) allow other third parties, consultants with people with subject matter expertise to say, 'I can define how these dead elements map to the FIX world, the Swift world, etc.'. Application vendors have to wake up and think, 'Is it intellectual property for me to just go, 'Here is how I represent an equity trade in my system?' I don't think it is. If they were more open, it opens the door for people to have off the shelf functionality, which would lead to more rapid implementation and greater agility."

**Taylor** refers to an emerging trend of mutualisation of costs and shared services and expects this to intensify. "Whilst few institutions can spend however much their individual cost is to collapse all of these systems, what we are seeing is an understanding that there are certain areas in which competition is pointless. From an operations perspective, just because you have got the best settlement team on the street, does that really mean anything? Probably not."

> *At banks where I have worked we have had as many as 230, 240 different systems hooking together in some way.*
>
> **Tim Fox**

Sharing has enormous cost saving potential, agrees **Pickles**. "It is a strange environment when you consider that we have had exchanges for 500 years and we still haven't got to the stage where they are doing something as simple as sharing the same technology approaches."

"There are about six organisations in the financial sector that are key to a national market - the central bank, the other market regulators, the stock exchange, a derivatives exchange, a CSD and a CCP," he concludes. "If those organisations started to look at how they could consider themselves as application providers and decided to work on a way that those services could be shared more effectively, you would hammer down the cost of operations across firms."

# A Report from the Trade Life Cycle Session at the ISS MAG 2013 Summit

**Panelists:**

**Lee Burman**, European Head of Market Infrastructure, Morgan Stanley

**Alan Cameron**, Head of Global Strategic Uk Broker Dealers and Bank Relationship Management Teams BNP Paribas

**Anthony Cole**, Head of Sales and Marketing London Stock Exchange Group

> *On the operations side, you are looking at large scale projects that fundamentally alter the way we do business.*
>
> **Lee Burman, Morgan Stanley**

Recent and forthcoming changes to the post-trade environment meant that participants in the trade life cycle session of the ISS Magazine Annual Post-trade Technology Summit had plenty to discuss.

The first topic of discussion was potential structural changes to the settlement sector, with **Lee Burman**, European Head of Market Infrastructure Morgan Stanley suggesting that after many years when operations were a bit of an afterthought, there is now much more dialogue with the business unit.

"On the operations side, you are looking at large scale projects that fundamentally alter the way we do business. There are huge change management programmes going on and we have to have a lot of oversight in terms of where our dollars are being spent, what the return on investment looks like and how it shapes the future of the firm. Whether it is in the financial markets side or the payments side, people are starting to recognise that back office functions are what keep the business going."

> *The answer is to look for infrastructure interoperability and regulatory changes that allow people to choose where to put their business.*
>
> **Alan Cameron, BNP Paribas**

According to **Alan Cameron**, Head of Global Strategic UK Broker-Dealers and Bank Relationship Management Teams BNP Paribas, infrastructure consolidation is inevitable if Europe is going to have more efficient and robust capital markets.

"There are a number of things happening that will make that possible in the future. Once CSDs become interoperable, combining that with what will come in with the Central Securities Depository Regulation (CSDR) where issuers will be able to choose where they issue their securities will give a lot of freedom. We are seeing consolidation at last in the CCP area, but there are also new CCPs emerging."

The post-trade world can learn a lot from what has happened over the last 10-20 years in pre-trade, says **Anthony Cole**, Head of Sales and Marketing London Stock Exchange Group. "It is about standards, an event driven approach rather than a database, a data-centric approach and increasingly real time."

**Burman** explains how his IT and operations teams have different approaches to T+2, with IT wanting to change everything over a weekend while operations prefers a phased changeover because of the potential for more fails among non-automated clients.

However it is implemented, **Cameron** is convinced of the benefits. "We have made great progress in reducing settlement risk with DVP. Pre-settlement risk is still there so cutting it from three to two days will give us harmonisation with the FX markets and move us more in line with what is happening in Asia and ultimately the US. The sell side firms are fully engaged with it – I am not so sure that is true on the buy side."

When asked to assess the impact of T2S, **Burman** refers to lower cross border settlement costs but adds that there will still be a place for national CSDs. "T2S was meant to become the unified book of record for European settlement and now there are all kinds of arguments about when that settlement is going to actually occur. We see a lot of national fragmentation and it is more expensive."

ALAN CAMERON

Risk isn't being removed from the system but rather being moved on to another player, he continues. "We need to have recovery and resolution protocols in place. It has been interesting to see how quickly everybody has got on board with this and the change that we are already seeing in the marketplace. There is some talk about the variation margin being met by assets rather than cash on the buy side - that could be a very big change for everybody and a bonus for us in terms of the extra collateral we need to find."

**Burman** describes having a clear view of all your liquidity minute-to-minute as a key development. "Interoperability is not just about Europe anymore – it is about trying to link us up to a JGB (Japanese government bond) book in Tokyo, about being able to link to Brazil, Canada, the US to exploit the ability that we have in those collateral pools to meet our requirements and meet them quickly so that we have an understanding of how many assets we have to trade with."

The answer is to look for infrastructure interoperability and regulatory changes that allow people to choose where to put their business, says **Cameron**. "It is important that these infrastructures become more robust as well as more efficient. They should become more robust because settlement will be in central bank money and you will have auto-collateralisation."

There are two major risks about what happens to CSDs in the future, says **Burman**. "The first is that they build businesses that nobody needs. We have seen the global custody business in Europe become a graveyard for suppliers over the years. The banks that built global custody businesses based on local market franchises all ultimately gave up because they couldn't get the scale that they needed. The worst thing would be for all the CSDs to think that they can become something that they can't and to spend a great deal of money on it and for that cost to be passed onto the users of their monopoly services."

The other danger is that they end up doing more risky things. "We are forced to have risk in CSDs, but we want it to be a risk on a CSD doing something we know and understand. This is why CSDR is so important. If Europe is to be revitalised, it needs to have more efficient capital markets and be able to connect the firms raising money with the capital suppliers."

"There is a huge role there for the CSDs to play in being a link between the corporate world and the financial world. With more things going through central clearing, with more needs for collateral and where that collateral is actually going to reside at the CSDs, you could be building up some large concentration risk which needs to be managed."

One of the interesting things about CSDR, according to **Cole**, is that it put on the table the subject of T+2 and everyone was saying, 'This is going to be in it.' "The industry looked at it and thought, 'We don't have to wait for CSDR to do this.' When we looked at the scheduling, in fact we couldn't wait. The impact of what you are thinking is going to be in regulation happens, in this case, before the regulation actually takes effect."

He believes that one of the most interesting things about T2S is whether large firms will be able to use it to take more control of their own settlements. "If they do that, how is the asset servicing going to happen? A lot of firms thought at the beginning that this was something that they could get in place before T2S. Now, most of are thinking 'We have probably just missed that one. We don't want to do it during the conversion periods, so it is maybe something we want to get in place after T2S.' There will be a huge amount of work going on across that over the next three years and then there will be remedial work."

The other big impact coming down the line is the amount of capital that firms will have to put aside for their various activities with Basel III and this is being interpreted differently in each market. "It is hard to know what impact that will have," acknowledges **Cole**. "You read predictions of doomsday scenarios for fixed income trading where the amount of capital that will have to put aside for that will be so huge that things could dramatically change."

"Luckily we have managed to convince regulators that repo trades are necessary to the functioning of capital markets. This is why we need this two-way conversation with the regulatory bodies - the last thing we want is to handicap the fragile recovery that we are currently seeing through some regulatory issue."

On the question of whether regulators play an active role at a national level, **Burman** observes that regulators in the UK appear to be in the vanguard of standards setting.

"When you look at interpretation and what it is doing around Basel III and views on liquidity, London is a centre of leadership and excellence and the FCA has been at the vanguard of trying to make sure that the regulations are enacted in the right way. It is going to be fascinating to see how this plays out because where you have different interpretations, it makes things more difficult. We want certainty and ESMA is heading in the right direction."

However, the really big changes don't just come from regulation, he concludes. "For example, T2S is a project. It is about a change of mindset."

*"The worst thing would be for all the CSDs to think that they can become something that they can't and to spend a great deal of money on it and for that cost to be passed onto the users."*

**Lee Burman, Morgan Stanley**

LEE BURMAN

*"You read predictions of doomsday scenarios for fixed income trading where the amount of capital that will have to put aside for that will be so huge that things could dramatically change."*

**Anthony Cole, LSEG**

# The International Securities Services Q4 2014 Global Directory and Survey of Service Providers and Technology Vendors

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## BOTSWANA

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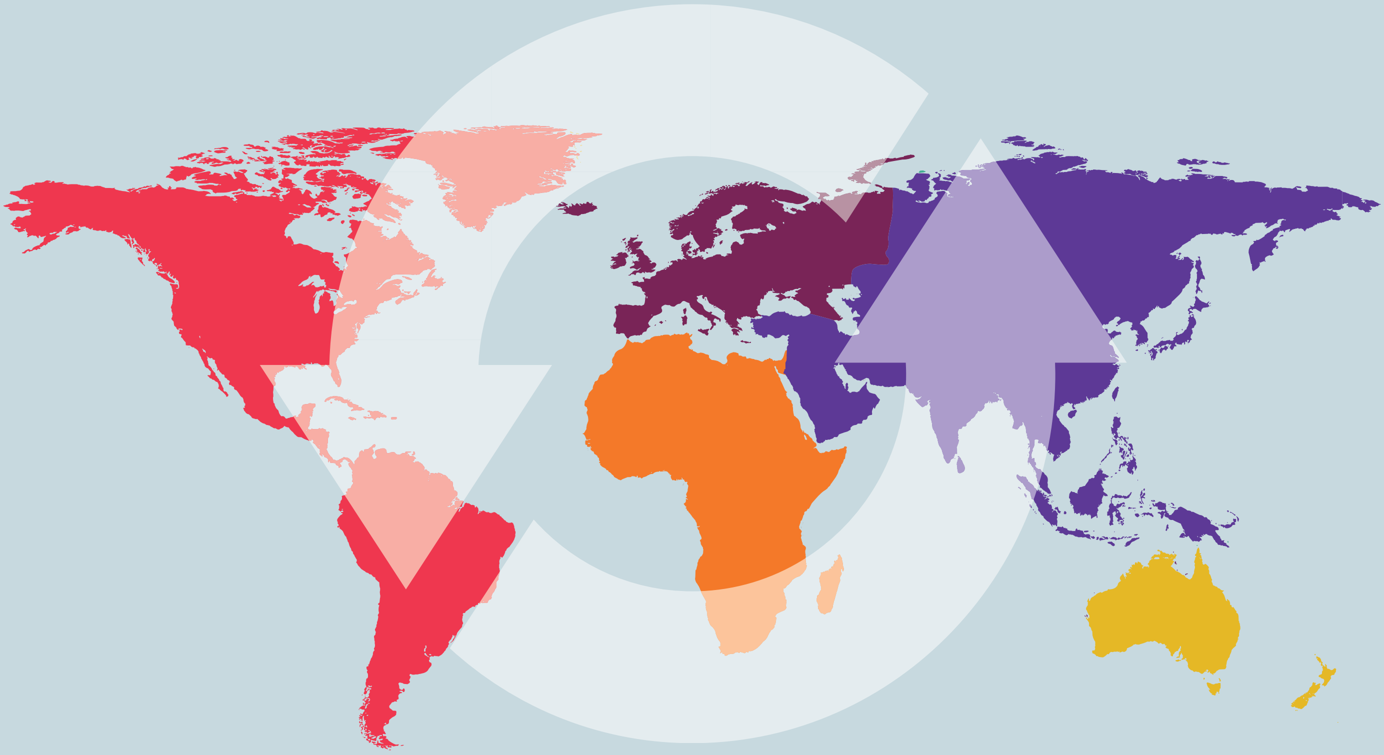

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