

ISO 20022 Newsletter

Chairman's Letter

Dear 20022 Members:

Standards have received wide attention among those looking to improve their messaging needs. And, 20022 standards are receiving growing appeal within the standards community tied to the financial services arena.



In this issue of 20022 NEWS you will find many examples from our members of work progressing within our community to make ISO 20022 standards more relevant to global users. For example, the lead article in this issue describes the effort the DTCC took on to develop a 20022-compliant messaging system that will be rolled out in the U.S.

While in Europe, activities involving SEPA challenges are reviewed as well as other adoptions of work derived through the 20022 process.

Through our upcoming meeting in Oslo, we will have the opportunity to discuss these and other events that tie the 20022 world together. See you in Oslo!

Gerard Hartsink, Convener, ISO 20022 RMG

One Giant Leap for DTCC and ISO 20022

by Patrick Barthel

In November 2011, The Depository Trust and Clearing Corporation (DTCC) will roll out their new ISO 20022-compliant messaging system. The new system will change the way the financial industry receives corporate actions announcement information. This will mark the beginning of a multi-year, phased effort to transition the United States financial community to ISO 20022 messages for corporate actions processing.

DTCC plays a critical role in supporting the post-trade infrastructure for the United States financial market. At the end of 2010, DTCC, through its subsidiaries, held in custody approximately 85 to 90 percent of all equity, municipal bond, and corporate bonds in the United States worth more than \$36.5 trillion. While most investors might assume that

(continued on page 2)

IN THIS EDITION

One Giant Leap for DTCC and ISO 20022.....	1
ISO Standards in the Financial Industry in Norway	3
"A Life in the Day of a Security"	5
SEPA and the Empowerment of the European Commission to Amend the ISO Standards of the SEPA Credit Transfer and SEPA Direct Debit Rulebooks and Implementation Guidelines	8
ISO20022 in Payments – A Brief Update	14
Report on the Securities SEG	15
ISO 20022 Registration Authority is Kept Busy	16
Thoughts on e-Invoicing Ecosystems	20
New Edition of ISO 20022	21
Honing the ISO 20022 Business Model	22

For more information on ISO 20022, consult the ISO 20022 website at www.iso20022.org and get access to:

- Two scripted Powerpoint presentations on the [home page](#) to understand the ISO 20022 value proposition, the role of the various registration bodies, and what has been developed so far
- How to become an ISO 20022 'submitting organization' and develop [new ISO 20022 messages](#) or how to submit [updates to existing messages](#).
- Who is representing your country or organization in each of the ISO 20022 registration bodies: the [Registration Management Group](#) (RMG), the five [Standards Evaluation Groups](#) (SEGs) and the [Technical Support Group](#) (TSG).
- Which are the current [development projects](#) and their status
- The [catalogue of ISO 20022 messages](#) including the latest version of ISO 20022 messages and the archive of previous versions.

If you have questions, please send them to the ISO 20022 Registration Authority at iso20022ra@iso20022.org.

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the securities they own are held by their brokers or banks, they are, in fact, held by the Depository Trust Company (DTC) and registered in the name of Cede & Company, the nominee name of DTC. That fact gives DTCC specific responsibilities.

Whenever a corporate action takes place – i.e., a dividend is paid on a stock, interest is paid on a bond, or there is a stock split, merger, spin off, etc. – most of the money, securities or information goes to DTCC. DTCC must then ensure that the correct amount of money is disbursed to the various brokers and banks, which are, in turn, responsible for distributing those entitlements to the investors. Millions of corporate actions take place each year in the United States involving trillions of dollars, and virtually all of those corporate actions are processed at DTCC.

Several years ago, DTCC decided to look at the legacy systems it used to process corporate actions. Since there was not one central system in place, but rather many different systems, each with its own process and protocol, DTCC focused on uniting all corporate actions processing into a single system that would allow for a more efficient handling and processing of corporate actions. As the analysis progressed, DTCC also noted that a new, more flexible message system was needed in order to communicate with the brokers and banks who were members of DTCC's clearing agencies. The new standard selected was ISO 20022.

Since the creation of DTCC's depository in 1973, it has utilized its own proprietary formats for corporate actions processing. So, why switch to an international standard, and why ISO 20022? DTCC recognized that it needed to respond to an ever-changing environment and needed to be able to accommodate what was becoming a global investment business. DTCC's customers, which include the largest banks and brokerage firms in the United States, had expanded their businesses throughout the world and wanted to streamline, as much as possible, the

standards and formats used to communicate. ISO 20022 meets those needs and offers a host of benefits.

ISO 20022 is flexible, both in terms of its content and tailoring of output. As new corporate actions are developed, the messaging system can change to meet the demands of the business, not the other way around. In addition, ISO 20022 is XML-based, which allows for easier and more efficient yearly maintenance, and the messages themselves carry with them a schema that is used to confirm that each data element is populated with a valid value.

There are also several business benefits that DTCC and its customers will derive from the ISO 20022 standard, not the least of which will be greater straight through processing due to the fact that corporate action events will be announced using a data model that conforms to market practice. As part of the new data model, DTCC will be providing a unique Corporate Action ID for each event, which can be tracked through the life cycle of the event – from announcement, to election, entitlement, and payment. DTCC's new data model also will include a more comprehensive and granular number of data elements that will allow for greater accuracy and, ultimately, less processing risk on the part of the customers.

In developing data fields for U.S. and global corporate actions, DTCC worked closely with SWIFT, ISO 20022's registration authority. DTCC then worked with the Securities Markets Processing Group (SMPG) and the International Securities Association for Institutional Trade Communication (ISITC) to develop proposals for changes to the ISO 20022 standards as it related to corporate actions, which were reviewed and approved by the Securities Standards Evaluation Group, a group of international industry experts who accept or reject changes to the ISO 20022 standard during the annual maintenance process.

One of the key components in preparing to roll out the DTCC message system has been a six month pilot testing program – performed with four of DTCC's customer firms – of the new ISO 20022 messages for corporate announcements. That testing has been performed with four of DTCC's customer firms. The extensive testing period has used production-like data to provide a complete shake out of the new fields and of the standard overall, before it goes live in November 2011. In addition to testing the new ISO 20022 messaging standard, the pilot firms also have been utilizing a new browser-based user interface, which is critical to the gathering and dissemination of data and how customers will elect to process events in the next phase of the project.

The testing period also allowed DTCC to address one of the key issues in disseminating corporate actions announcements. These announcements have typically been made in paper documents. The critical details of those *(continued on page 4)*

DTCC ALSO NOTED THAT A NEW,
MORE FLEXIBLE MESSAGE SYSTEM
WAS NEEDED IN ORDER
TO COMMUNICATE WITH THE BROKERS
AND BANKS WHO WERE MEMBERS
OF DTCC'S CLEARING AGENCIES.
THE NEW STANDARD SELECTED
WAS ISO 20022.

ISO Standards in the Financial Industry in Norway

By Atle Fjereide, DnB Nor Group

NORWAY: THE PEOPLE, THE ECONOMY IN BRIEF

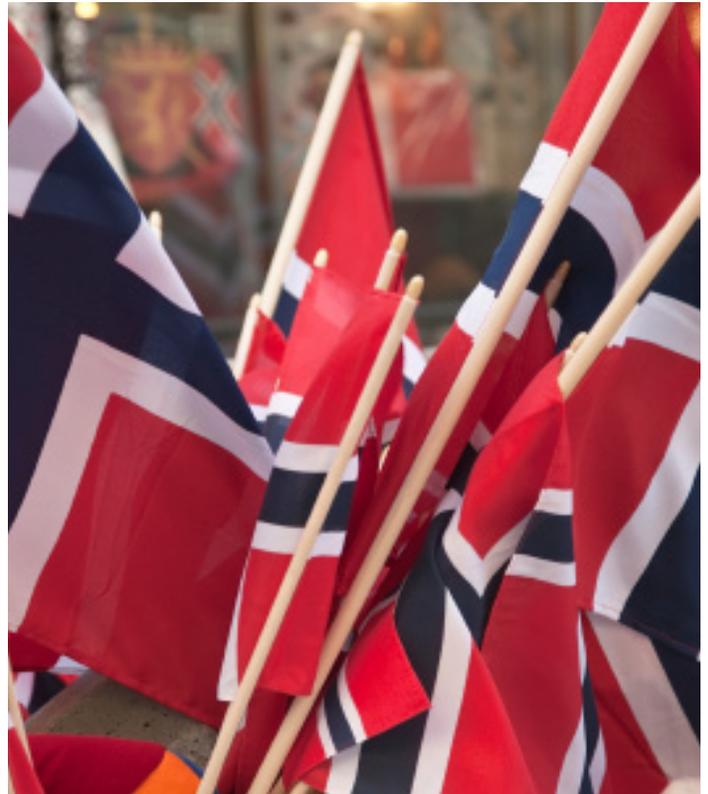
Norway is a country with approximately 5 million inhabitants, we have a well educated population with currently approximately 80 percent enrollment at the tertiary level of education. The unemployment rate is low and the cost of living is rather high – viewed against New York as a baseline with 100, Norway is about 150. We have an open economy where the main exports are; oil, gas, and products that represents more than 80 percent of the total. Main trading partners are the European Union (EU) that stands for 80 percent of our export and 68 percent of imports. Norway is not a member of the EU, and has its own currency. As a member of European Economic Area we implement most of the EU directives e.g. Payment Service Directives.

This background may explain how the financial sector in Norway has developed through the years. With our high cost of living and low unemployment rate, we had to focus on automating as many of the manual processes as possible. As a result, today we have the highest number of card transactions per capita and among the lowest use of cash, as a payment instrument, in the world. For payment of the consumer's utility bills, e-invoices stand for 13 percent of the total. In general we estimate that approximately 90 percent of invoices and bills are paid electronically; mostly as credit transfers in the net banks. Direct debits represent 12 percent of the payments. And we don't do checks.

IMPACT ON THE PAYMENT SYSTEM

How have we achieved these results: we started in the late 1980's with ATM's, cards and PC's. We had a quite interesting time where we believed it possible to compete within the industry on technology; well it wasn't. After several costly experiences, we decided to define a co-operative space and to agree on what and where we should compete. Our purpose now is economy of scale; fixed costs divided on many transactions, and usage of open standards where value is created through the number of participants in the network.

Our policy is to use global or EU standards, if there isn't a standard already we may decide to develop our own proprietary one. For instance we developed our own domestic standard for electronic credit transfers in the early 1990's; together with EDIFACT this is the dominant standard for credit



transfers in Norway today. For interbank clearing of mass payments we use a Norwegian variant of EDIFACT. We also have our own e-invoicing format and a national Bank ID version, although this uses ISO and ETSI standards as basis for specifications. Today we use ISO standards: ISO 9362 BIC, ISO 9735 EDIFACT, ISO 8583 messages (authorization of card transactions), ISO 15022 and ISO 20022 (SEPA).

USE OF ISO 20022

When it comes to the use of ISO 20022 messages the situation today is that the largest banks have made substantial investments in Euro and SEPA solutions, the medium and smaller sized banks haven't done this yet – they still send MT103's to their correspondents who converts these to the SEPA standard. The largest banks also have a few customers that use ISO 20022 formats.

In the Nordic community we are now working with harmonizing Nordic Implementation Guides for ISO 20022 Pay-

ment initiation and Cash Management Messages. Further, we are also making a Norwegian Message Implementation Guideline, applicable for local services, based on Common Global Implementation (CGI) Guides for ISO 20022 Payment initiation and Cash Management Messages.

If we look at the future, how will ISO 20022 fare in Norway? So far there is no demand from our customers to implement ISO 20022 and from most of the banks there is close to no focus at all on this standard. The main reasons behind this are we have our own currency and a very efficient payment system in use; that works, so why change? On the securities side, the opinion is that we have to capitalize on the investment we had moving to ISO 15022. The larger corporate clients tells us they invested quite a lot when they implemented EDIFACT, as what they expected to be a common global standard, but they still had to do adjustments in the standard depending on which bank they wanted to connect. So, will ISO 20022 end up not as one standard but many variants?

CHANGES TO CAUSE ISO 20022 IMPLEMENTATION

To achieve increased usage of ISO 20022 in Norway we are dependent on the larger banks moving in the 20022 direction. An important factor for moving towards ISO 20022 could be a SEPA end-date. A SEPA end-date will in our opinion also move a SWIFT end-date for FIN messages forward, like we have got for fund messages. We are currently elaborating on how to interpret the discussions related to "Processing of credit transfers and direct debits shall not be hindered by technical obstacles". It may be hard to deduce the pa-

pers that files sent from a corporate customer require that ISO 20022 must be used? If so, our international companies might get an incentive to implement the standard.

For the largest banks the argument for moving to ISO 20022 is that we must have the SEPA solution to be in business, and it is very costly to have many different standards and syntaxes that need updating. So our incentive to act is cost reductions by reducing the number of standards we use and a vision of one common standard in the majority of markets we operate. This also is the major reasoning behind a project that some of the Nordic banks are working on; a "Nordic Payment Area" based on the SEPA idea, and where ISO 20022 is the chosen standard, with the opportunity to make the existing country standards redundant.

There are many hurdles that have to be overcome before we implement ISO 20022 as the dominant standard in Norway. The majority of the Norwegian banks are small or medium sized, and they do mostly domestic transactions, and as far as they are concerned the existing system works fine. Within all the banks there is a huge competition to get a piece of the annual IT budget; first of all the regulatory requirements have to be done, then customer needs and eventually invest in infrastructure solutions. ISO 20022 has to show its business rationale before the Norwegian community moves in its direction. Target 2 Securities and a SEPA end-date, and hence a SWIFT FIN end-date, may produce that rationale. The high costs of running both 'legacy' and SEPA products in parallel can be too costly, especially if there is a constant pressure on the prices one is able to take from the market. ●

One Giant Leap for DTCC and ISO 20022

(continued from page 2)

paper documents had to be determined by each individual financial firm and then transmitted to their customers. The risk was that those documents – many of which could run dozens or even hundreds of pages – had to be interpreted and rekeyed, which created a substantial risk for error. Following the SEC's recent mandate that issuers begin using what is known as eXtensible Business Reporting Language (XBRL) to electronically tag financial data, (not including corporate actions), DTCC proposed that XBRL be extended to cover corporate actions announcements. DTCC then proceeded to map XBRL data fields for corporate actions to those it had developed for ISO 20022.

While a significant step, the implementation of ISO 20022 for corporate actions announcements in November is only the beginning of the process. In 2012, DTCC will begin a pilot program for firms to send messages for the life cycle of

election processing and entitlements. Those are messages that brokers and banks send to DTCC to allow them to do things such as select an option on a dividend or elect a dividend reinvestment program, or DRIP.

Ultimately, DTCC will support only ISO 20022 messages for corporate actions processing, as the legacy systems and older processes are phased out over the next several years.

"Corporate actions processing is a critical function for DTCC and the participants it services," said Dan Thieke, DTCC Vice President for Asset Services. "We've elected to take a phased approach to reengineer our data delivery systems, as well as our new user interface. Doing so allows us to reduce risk by testing thoroughly, and making sure we have a solid, error-free capability before transitioning our participants to ISO 20022." ●

“A Life in the Day of a Security”

By Kevin Wooldridge, Convenor, *Securities SEG*

To illustrate the complexity of the securities domain, let's take a look at the life of a small company, Example.com. (By the way, before choosing this name, I naturally looked up 'example.com' on the internet; I was presented with an ICANN page advising that the name is reserved for exactly this purpose, and is free for anyone to use. Such foresight is to be commended, and neatly illustrates the depth of responsibility that goes hand in hand with being a standards body).

Having operated it successfully as a start-up, the owners and founders of Example.com now wish to raise some additional capital for expansion, by floating shares on a stock exchange.

The process of securities issuance is a complex dance involving the issuer, using the services of an issuer's agent, the exchange itself, the relevant issue identifier National Numbering Agency (NNA), a registrar (who may or may not be the same as the issuer's agent), a Central Securities Depository (CSD), one or more investment banks to manage the placement of the initial offering, and, of course, the end investors.

No ISO 20022 messages exist to service the specifics of the issuance process. A Business Justification was submitted in 2007, but has been withdrawn.

Once the Example.com shares have listed, static data about the security is required by the market. The CSD, the stock exchange, and data vendors are all able to supply the markets with this data. Although no ISO 20022 messages exist yet to support this flow of reference data, the data itself has been modelled and included in the ISO 20022 Data Dictionary, as the Financial Instrument Business Information Model (FIBIM). In addition, candidate messages have been developed by SWIFT in the context of Target2Securities.

SECONDARY MARKET TRADING

And so secondary market trading begins. Example.com proves to be a hot property and everyone wants some of the action. Brokers register their interest in the security, request and receive quotes, in a time-sensitive environment where latency is key: acting on a price shift micro-seconds before your competitors can make the difference between a bad deal and



a great one. A deal is struck between counterparties and an order is created and agreed between them.

ISO 20022 messages are in the process of being created for pre-trade (to express interest in a stock, sending and receiving price quotes) and trade, by FIX Protocol Ltd., and SWIFT. These have been based on the existing FIX messages, using the ISO 20022 data model as the point of translation. The resulting reverse-engineered message models will be used to generate ISO 20022 compliant

messages in the FIX syntax.

Once the trade has been agreed, a series of post-trade messages is sent allowing both parties to confirm the details of the trade, and to advise relevant third parties, where necessary enriching the trade data with supporting data necessary for downstream activities, such as the allocation of a trade across multiple underlying clients.

A Business Justification has been submitted by SWIFT and Omgeo to create ISO 20022 messages in the post-trade space (although not covering all activities). The first tranche of messages has been approved and will be published shortly.

SETTLEMENT

Now the trade must settle. The seller's custodian and the buyer's broker need to match the transaction on the settlement system (usually the CSD). They will previously have opened an account at the CSD for this purpose (ISO 20022 messages for the setting up of accounts have been proposed for T2S, and development will soon begin on ISO 20022 Standing Settlement Instruction messages, led by ISITC, Omgeo and FIX Protocol Ltd). The transaction must be instructed, and matched. A few days later, the transaction settles; the seller receives cash and the buyer takes ownership of the shares. Throughout this process, the participants will want to know the status of the transaction, and will expect to be able to receive updated account balances, for reconciliation.

Since the ISO 15022 reverse engineering initiative by SWIFT from 2007 to 2010, ISO 20022 sports the full range of settlement messages, covering instruction, allegation, cancellation, status updates, and confirmation.

AND THE NEXT TIME YOU LOOK AT THE CATALOGUE OF ISO 20022 MESSAGES,
DON'T JUST SEE A LONG LIST OF MESSAGES, TRY TO SEE
THE COMPLEXITY OF THE BUSINESS PROCESSES THAT THEY SUPPORT.

In most markets, the trade is cleared through a Central Counterparty (CCP), which allows for efficiency gains through netting, and risk reduction through counterparty anonymity. Messages for netting, margining, and collateral management among others are the subject of an ISO 20022 Business Justification from SWIFT and FIX Protocol Ltd.

Usually, the transaction must also be reported to the regulator. ISO 20022 messages exist for this purpose, designed by SWIFT following a multi-market consultation.

COMPLEX OPERATIONS

The shares may be subject to more complex operations than trading: they may be lent or borrowed, or used as collateral, either individually or as part of a collateral basket managed by a central party (usually the CSD or ICSD). Most of these operations leave an open return leg, which must be monitored and managed. ISO 20022 messages exist for securities financing, and are being designed for bilateral collateral management.

With such complex operations, it is vital that account holders can tell what their holding is at any stage. Statements are needed on a custody and accounting basis.

And, back to Example.com. Noticing their success in the secondary market, the board of Example.com wish to raise additional cash through a rights issue. The process of announcing the corporate action is again complex, with the issuer, issuer's agent, data providers and the CSD all involved. The board of Example.com take the decision to tag their prospectus using XBRL (eXtensible Business Reporting Language) tags, which codify the key data elements relevant to the corporate action, facilitating conversion into an ISO 20022 data model or ISO 20022 messages. Each custodian may add their own options, possibly due to currency conversion or other service, until there are multiple versions of the corporate action data in the market. These versions may then be refined to create a so-called 'golden record'. Corporate action announcement messages may be sent by specialist data providers, CSDs, and

custodians. The rights are issued. End investors register their interest with their custodian or broker, and make payment. Elections are sent to the issuer's agent, often via the CSD. Finally, the issuer's agent distributes the new shares to the investors.

ISO 20022 messages exist to support the full corporate action lifecycle, from issuer agent to end investor (thanks to submissions from Euroclear and SWIFT).

SUCCESS

After a successful year, the board of Example.com call the Annual General Meeting (AGM). Investors are invited to attend and vote in person, or to send in their votes via proxy. ISO 20022 proxy voting messages exist to allow the announcement of the meeting, registering of votes and dissemination of the meeting results.

Before the meeting, the issuer may wish to obtain an accurate list of its end investors. This can be done by requesting custodians and other market participants to identify the beneficial owner in an iterative process until the end investor is identified. There are currently no active submissions for ISO 20022 messages for this purpose.

At the AGM, the dividend is agreed. The dividend is announced and processed using the same ISO 20022 corporate action messages as the rights issue. In fact, there is over sixty different types of corporate action, each with its own specifics as to how it is processed, often varying from market to market, although there is a global ideal defined by the Securities Market Practice Group (SMPG). Corporate actions are one of the most complex areas of securities processing, and the ISO 20022 standard dictionary and messages must be flexible enough to cater for the functional richness as well as the regional diversity required. A further example of the complexity in this area is the case where a transaction remains unsettled at the point that the record for the dividend is taken by the issuer's agent. A market claim results, which ensures that the dividend reaches the entitled party. No ISO 20022 messages for market claims are currently being designed.

So far we've looked at the lifecycle for the ordinary equity shares in Example.com. And you may feel that this is already complex enough. But it is the diversity of financial instruments that really takes the complexity of the securities market to another level.

The board of Example.com may decide to raise funding by other means. They may issue a Eurobond, which is a fixed income debt instrument that can be traded and settled on a secondary market like equity. As the interest rate available from banks goes down, the fixed interest rate of the Eurobond appears more attractive to investors by comparison, and the price of the Eurobond increases. Interest payments are effected using the same corporate actions messages as for equities. The final redemption of the Eurobond for its face value is carried out in the same way.

OTHER OPTIONS

Other options exist, such as short term commercial paper. Like the Eurobond, the issuance process has its own peculiarities, often involving a very short timeframe.

As Example.com becomes more and more successful, it catches the eye of a number of fund managers. They start to include Example.com shares in their 'growth' investment funds. Most investment funds are bought and sold in a primary market. An investor buys units directly from the fund itself, through its transfer agent, or from a fund manager, and sells them back (hopefully) at a higher price.

ISO 20022 messages exist for subscription (buy) and redemption (sell) orders for funds, as well as various status messages and confirmations, transfers in and out, and fund portfolio transfers. ISO 20022 messages also exist for the transfer of reference data about a fund. A 'fund processing passport' contains basic information about an investment fund to facilitate international operations. A Business Justification for a more complete 'funds prospectus' has been received from the Brazilian market.

Some funds are traded in a secondary market ('exchange traded funds'), while others such as hedge funds have their own specialised processes. A Business Justification to support the design of messages for 'non-standard' funds has been approved.

So far we have not looked at more complex financial instruments, such as listed derivatives or Over The Counter (OTC) derivatives. Listed derivatives such as warrants can be traded on traditional stock exchanges or on derivative exchanges, using standard ISO 20022 messages.

OTC derivatives are typically only traded bilaterally between two parties. The complex nature and longevity of these instruments requires a different approach to messaging, requiring data rich, verbose messages that are almost contractual in nature. Messages exist in the FpML syntax for this purpose; in the securities industry Investment Roadmap published in September 2010, FPL, FpML, ISITC, SIIA/FISD, SWIFT and XBRL agree to migrate to a common underlying ISO 20022 business model, but keep, in certain circumstances, existing domain specific syntaxes and protocols in order to protect the investments of market participants. Under the Investment Roadmap, most of the OTC derivatives processes will continue to use the FpML syntax.

So from our small startup, Example.com has grown in complexity to cover a range of operations in a diverse mix of instrument types. The business drivers behind these operations sometimes lead to different syntax requirements: short, quick messages for pre-trade; longer, more complex messages for corporate actions; even longer, more verbose messages for OTC derivatives. Many of these operations are already covered by ISO 20022 messages, with more to follow. Where gaps exist, market players are welcome to join the ranks of message submitters. And the next time you look at the catalogue of ISO 20022 messages, don't just see a long list of messages, try to see the complexity of the business processes that they support. ●



SEPA and the Empowerment of the European Commission to Amend the ISO Standards of the SEPA Credit Transfer and SEPA Direct Debit Rulebooks and Implementation Guidelines

By Gerard Hartsink, *Chair of the European Payments Council*

INTRODUCTION

This article explains the key concepts underlying the vision of a Single Euro Payments Area (SEPA). It highlights the impact of the draft Regulation on establishing technical requirements for credit transfers and direct debits in euros inclusive the empowerment of the European Commission to amend the rules and standards of the SEPA Credit Transfer and SEPA Direct Debit Rulebooks and Implementation Guidelines. The article addresses the following aspects:

- The SEPA vision.
- Governance of the SEPA process at the European level by co-regulation of the public and private sector.
- The regulatory environment created by the European Union (EU) legislator to promote the integration of the euro payments market.
- The SEPA payment schemes based on global technical ISO standards developed by the European Payments Council in close dialogue with customer representatives. This section includes a brief overview of the end-to-end payment process to facilitate a better understanding of these schemes.
- Implementation of the SEPA payment schemes.
- Oversight of euro payment schemes.
- Outlook on the next steps in the SEPA process. This section focuses on the forthcoming EU Regulation expected to establish mandatory deadlines for migration to the SEPA payment schemes for euro credit transfers and direct debits.
- The impact of the empowerment of the European Commission on the ISO standards.



on the integration of the euro payments market. They called on the payments industry to bolster the common currency by developing among more a set of harmonised payment schemes for electronic euro payments. The European Public Authorities have taken the position that the migration of the multitude of existing national euro credit transfer and euro direct debit schemes into a single set of European payment schemes is a natural step towards making the euro a truly single and fully operational currency.

Within SEPA, all euro payments will be domestic. As such, SEPA payment instruments are designed to eventually replace national euro payment instruments existing today. SEPA is currently defined as consisting of the EU – 27 Member States plus Iceland, Norway, Liechtenstein, Switzerland and Monaco. In SEPA, bank customers can make electronic euro payments within and across 32 countries under the same basic rights and obligations.

The impact of SEPA however, transcends payment services. The European Commission expects the legal and technical SEPA harmonisation exercise to facilitate the dematerialisation of business processes by replacing paper-based procedures with standardised electronic solutions such as electronic invoicing, for example. These objectives are also set out in the European Commission Communication ‘A Digital Agenda for Europe’ (May 2010), which defines the key enabling role that the use of Information and Communication Technologies (ICT) will have to play if Europe wants to succeed in its ambitions for 2020. The Digital Agenda for Europe is one of the seven so-called flagship initiatives of the ‘Europe 2020 Strategy’ launched by the European Commission in March 2010 to prepare the EU economy for the challenges of the next decade.

THE SEPA VISION

SEPA stands for an EU integration initiative in the area of euro payments. The SEPA vision was set out by EU governments in the Lisbon Agenda of March 2000, which aims to make Europe more dynamic and competitive. Following the introduction of euro notes and coins in 2002, the political drivers of the SEPA initiative – EU governments, the European Commission and the European Central Bank (ECB) – focused

GOVERNANCE OF SEPA AT THE EUROPEAN LEVEL

The realisation of SEPA is the result of co-regulation involving public authorities and private sector bodies that share a common vision for the euro payment market. The main actors driving forward the SEPA process at the European level are:

The **European Commission**, a politically independent collegial institution that embodies and defends the general in-

terests of the EU and promotes European integration. As the political driver of SEPA, the European Commission and, in particular, the Directorate General Internal Market and Services, monitors the progress of SEPA migration in EU Member States and publishes annual progress reports on SEPA migration. In close cooperation with the European Central Bank (ECB), the European Commission issued the Communication 'Completing SEPA: a Roadmap for 2009–2012'. This roadmap identifies the actions to be completed by all stakeholders (EU and national authorities, industry and users) in the following areas: (1) foster migration; (2) increase awareness and promote SEPA products; (3) design a sound legal environment and ensure compliance; (4) promote innovation; (5) achieve standardisation and interoperability; and (6) clarify and improve SEPA project governance.

The **Council of the European Union** represents EU Member States. The Council meets in various configurations; each dealing with a number of fixed areas and is comprised of the authorised national ministers. Every minister in the Council is authorised to enter into agreements on behalf of their government. The Council decides on legislative proposals. The Economic and Financial Affairs Council (ECOFIN) is one of the oldest configurations of the Council of the EU and is composed of the Economics and Finance Ministers of the 27 EU Member States. In December 2009, the ECOFIN considered that establishing definitive end-dates for migration to the harmonised SEPA payment schemes would "provide the clarity and the incentive needed by the market, ensuring that the substantial benefits of SEPA are rapidly achieved and that the high costs of running both legacy and SEPA products in parallel can be eliminated".

The **European Parliament** is the only directly elected body of the EU. In many policy areas, decisions on new European laws are made jointly by the European Parliament and the Coun-

cil of Ministers (see ECOFIN above). The European Parliament called on the European Commission first in March 2009 and again in March 2010 "to set a clear, appropriate and binding end-date" for migration to SEPA payment schemes after which all payments in euros must be made using the SEPA standards".

The ECB is the central bank for Europe's single currency, the euro. The Eurosystem comprises the ECB and the national central banks (NCBs) of the 17 countries that have adopted the euro. In its role as a catalyst for the integration of the euro payments market, the ECB has long argued that the monetary union remains incomplete until Europe converts to common electronic euro money across all forms of payment. The ECB actively monitors the progress of SEPA in close dialogue with the political authorities, the banking industry and payment service users. The ECB also publishes regular SEPA Progress Reports. The ECB SEPA indicators available on the ECB website track the rate of SEPA market uptake. In its 'Seventh Progress Report on SEPA' published in October 2010, the ECB (Euro system) states its expectation that the harmonised SEPA payment schemes developed by the European banking industry will replace national legacy credit transfer and direct debit schemes for euro payments.

In June 2010 the European Commission and the ECB established the SEPA Council. The objective of the SEPA Council, which brings together representatives of both the demand and supply sides of the payments market, is to promote the realisation of an integrated euro retail payments market by ensuring proper stakeholder involvement at high level and by fostering consensus on the next steps towards the full realisation of SEPA. On 7 June 2010 the SEPA Council adopted a Declaration to support an end-date for the migration to SCT and SDD.

The **European Payments Council (EPC)** supports and promotes the creation of the Single Euro Payments Area (SEPA). It is the decision-making and coordination body of the European banking industry in relation to payments. The EPC develops the payment schemes and frameworks based on global technical standards necessary to realise SEPA (for details see the section 'SEPA payment schemes and frameworks' below). The EPC defines common positions for the cooperative space of payment services, provides strategic guidance for standardisation, formulates rules, best practices and standards and supports and monitors implementation of decisions taken.

The EPC consists of 74 members representing banks, banking communities and payment institutions. More than 360 professionals from 32 countries are directly engaged in the work programme of the EPC, representing all sizes and sectors of the banking industry within Europe. The ECB acts as an observer in all EPC working and support groups and in the EPC Plenary (the Plenary is the decision-making body of the EPC). The EPC is a not-for-profit organisation, which makes all its deliverables; i.e. the SEPA Scheme Rulebooks and ad-

AS THE POLITICAL DRIVER OF SEPA,
THE EUROPEAN COMMISSION AND,
IN PARTICULAR, THE DIRECTORATE GENERAL
INTERNAL MARKET AND SERVICES,
MONITORS THE PROGRESS OF
SEPA MIGRATION IN EU MEMBER STATES
AND PUBLISHES ANNUAL PROGRESS REPORTS
ON SEPA MIGRATION.

acent documentation, available for download free of charge on the EPC Website. The EPC is not a supplier of technology or any goods or services.

SEPA is created by co-regulation where the public sector takes care for the legislative parts and the private sector for the business rules and standards.

THE REGULATORY FRAMEWORK

The history of the SEPA project reaches back to 1990 with the publication of a European Commission report 'Making Payments in the Internal Market' which outlined a community vision of a single payments area. This document stated that "the full benefits of the single market will only be achieved if it is possible for business and individuals to transfer money as rapidly, reliably and cheaply from one part of the community to another as is now the case with (in) most member states". To achieve this goal, the European authorities adopted several legislative acts designed to drive forward the integration of the euro payments market.

In 2001, the European Commission laid the foundations of its SEPA policy through **Regulation (EC) No 2560/2001** on cross-border payments in euro, whereby banks are not permitted to impose different charges for domestic and cross-border payments or automatic teller machine (ATM) withdrawals in the EU. This Regulation has also generally been understood as a turning point in the financial integration policy of the European legislator beyond its formal stipulations, as the Regulation was clearly intended to shock the banking sector into stepping up its efforts to achieve SEPA.

The revised version of this regulation; i.e. **Regulation (EC) No 924/2009**; approved by the European Parliament on 24 April 2009 introduces additional provisions which – in the eyes of the regulator – further promote EU financial integration in general, and SEPA implementation in particular. It has significant impact due to the introduction of the following provisions:

- The price parity requirements are extended to direct debits.
- The setting out of clear rules for transaction-based multi-lateral interchange fees until November 2012.
- Banks in the euro area offering direct debits today in euro to debtors are mandated to become reachable for cross-border direct debit collections from November 2010 onwards.

Regulation (EC) No 924/2009 became applicable across all EU Member States on 1 November 2009.

In addition, the European Commission recognised that integration of the euro payments market would only be possible within a common legal environment that would remove the local anomalies and differences. The first version of a 'New



Legal Framework for Payments' designed to harmonise the fragmented national legal provisions was issued in 2001. This working document ultimately resulted in the **Payment Services Directive (PSD)** published in the Official Journal of the European Union on 5 December 2007. The PSD has currently been implemented by all but one EU Member States. The PSD aims at establishing a modern and comprehensive set of rules applicable to all electronic payment services – not just SEPA services – in the EU. The PSD is not a 'SEPA Directive'. Rather, the very broad and ambitious scope of the PSD makes it the most significant and comprehensive piece of EU financial services legislation in relation to the payments market. The PSD is of particular relevance with respect to the rollout of SEPA Direct Debit services due to the fact that the PSD introduces common rules for the authorisation and the revocation of debits.

Last but not least, in December 2010, the European Commission published a proposal for a Regulation establishing technical requirements for credit transfers and direct debits in euros. The legislative initiative – commonly referred to as the 'SEPA Regulation' – states that credit transfers shall be carried out in accordance with this Regulation twelve months after it comes into force, while direct debits shall comply 24 months after it comes into force. In other words, this forthcoming Regulation will – among other things – set definitive deadlines for migration to SEPA (for further details on the SEPA Regulation see the section 'Outlook' below).

THE SEPA CREDIT TRANSFER AND DIRECT DEBIT SCHEMES AND IMPLEMENTATION GUIDELINES

To briefly recap the end-to-end payment process: a payment transaction is defined as an act, initiated by the payer or by the payee, of placing, transferring or withdrawing funds. The

so-called four-corner-model describes the flow of information and the players involved in a payment transaction; i.e. the payer, the payer's bank, the payee's bank and the payee. To exchange a payment, it is necessary to enable the exchange of funds (money) and messages between two PSPs. The term payment system as defined in the PSD means a funds transfer system with formal and standardised arrangements and common rules for the processing, clearing and / or settlement of payment transactions. These funds transfer systems can be PSPs as well as separate business – public or private – entities (which may or may not be owned by banks). In the SEPA context, a payment system in the meaning of a 'funds transfer system' is referred to as a 'clearing and settlement mechanism' (CSM). Market forces govern services offered by competing CSMs based on the SEPA payment schemes. In SEPA, there is a clear separation between the EPC as the scheme manager of the SEPA payment schemes and CSMs.

The SEPA payment services model is therefore based on the following three layers:

1. The payment scheme layer of the SCT and SDD Rulebooks and the Implementation Guidelines as performed in the cooperative environment.
2. The processing, clearing and settlement layer carried out by CSMs in the competitive environment.
3. The payment products and services layer as delivered by banks providing payment services to customers in the competitive environment.

The EPC is responsible, among other things, for the development and maintenance of SEPA payment schemes as defined in the SEPA Credit Transfer (SCT) and SEPA Direct Debit (SDD) Rulebooks. The SCT and SDD Rulebooks are master agreements, which are legally binding for the scheme participants; i.e. PSPs (banks or payment institutions) which adhere to the scheme(s). The SCT and SDD Implementation Guidelines are MIG's (Message Implementation Guidelines) of the ISO 20022 standards together with ISO Identifier Standards (BIC ISO 9362 and IBAN ISO 13616). These technical standards are not only relevant for SCT and SDD scheme participants but also for their customers (such as businesses), for CSM's and for vendors of payment technology for suppliers and buyers of payment services. The EPC members have taken the strategic decision to design the SCT and SDD Implementation Guidelines based on the global ISO standards and not on European standards.

The rules and technical standards that make up a SEPA payment scheme are defined by the EPC. The development of payment schemes through self-regulation by banks in close dialogue with customers represents the established approach in all national banking communities and in an outside SEPA.

The EPC fully recognises that payment services customers and CSM's are important partners in the process of making SEPA a reality. All stakeholders are encouraged to liaise with the national SEPA Stakeholder Forums in the 17 euro area countries that are accountable for the national SEPA migration plans. See www.sepa.eu. The EPC appreciates as the scheme manager of the SCT and SDD Schemes greatly the dialogue taking place in the EPC Customer Stakeholders Forum (CSF) and in the CSM Forum. The CSF specifically addresses the requirements of payment service users with regard to the SCT and SDD Schemes and related technical standards. In the CSM Forum the EPC has a dialogue with the Clearinghouses that clear SCT and SDD payments.

The EPC also invites all stakeholders to participate in the annual change management process governing the evolution of the SCT and SDD Schemes. This process provides all stakeholders with the opportunity to introduce suggestions for modifications of the schemes and to take part in the annual three-month public consultation on updates to be incorporated into the scheme rulebooks. On 19 November 2011 the SCT version 5.0, SDD version 5.0 and SDD version 3.0 become mandatory for the scheme participants that adhered to the schemes.

The SEPA payment schemes define sets of rules and technical standards for the execution of SEPA payment transactions that have to be observed by PSPs (the payer's bank and the payee's bank). The SEPA Rulebooks and Implementation Guidelines can be regarded as instruction manuals that ensure a common understanding between PSPs on how to move funds from account A to account B within SEPA. The following list includes examples of rules and standards that are typically defined in a payment scheme:

- Format of the account and bank identifiers: in the SCT and SDD Schemes, these are the International Bank Account Number (IBAN) and Business Identifier Code (BIC) based on these standards developed by the International Organization for Standardization (ISO).
- Standard data formats used to exchange messages between banks: the SCT and SDD Schemes rely on the SEPA data formats that are a subset of the global ISO 20022 message standards. These data formats are set out in the SEPA Implementation Guidelines published by the EPC with regard to the SCT and SDD Rulebooks.
- Rules for exception handling; i.e. refunds, returns and rejects.
- Number of characters carried with remittance information: in the SCT scheme, 140 characters of remittance information are delivered without alterations from the payer to the payee.
- Timelines to be observed by PSPs when executing a payment transaction.

The SEPA data formats in the Implementation Guidelines; i.e. the ISO 20022 message standards are mandatory for the exchange of SEPA payments between scheme participants (payment service providers offering SEPA services that have formally adhered to the SEPA payment schemes). To facilitate the seamless end-to-end processing of SEPA transactions, the EPC also made available recommended SEPA Implementation Guidelines applying to the customer-to-bank messages. The introduction of harmonised message standards to initiate SEPA payments based on the SEPA data formats provides an opportunity for customers to reach any bank in SEPA allowing for rationalisation which in turn would significantly reduce the costs associated today with the maintenance of a multitude of payment accounts and / or platforms in different SEPA countries. Taking into consideration differing market practices in the SEPA countries today, the use of the SEPA data formats in the customer-to-bank communication is recommended by the EPC. The EPC also published guidelines on recommendations on how to map SEPA transactions to payments reporting between banks and customers. As a result, payment-related information can now be moved along the entire process chain (customer to bank, bank to bank, bank to customer) in a manner compliant with the SEPA schemes and global ISO standards.

In summary, a SEPA payment schemes prescribe standardised processes to be observed by scheme participants operating in the payment industry in SEPA. In the area of payments, the introduction of the euro can also be regarded as a means of standardisation. The purpose of migrating from a multitude of national euro payment schemes for credit transfers and direct debits to a single set of harmonised SEPA schemes is equivalent to implementing standardised 'railroad tracks' for the exchange of euro payments across the EU.

The development of payment products and services based on the SEPA payment schemes including all product-related features is outside the scope of the EPC. The SEPA payment schemes allow for flexibility and contain optional features enabling PSPs to add features and services of their choice to the core services. SEPA payment products and services offered to the customer are developed by individual PSPs operating in the competitive environment.

IMPLEMENTATION OF THE SEPA PAYMENT SCHEMES

The EPC launched the SCT Scheme in January 2008. As of mid 2011, some 4500 banks representing more than 95 per cent of SEPA payments volumes offered SCT services. According to the publicly available SCT indicators compiled by the ECB the share of SCTs as a percentage of the total volume of credit transfers generated by bank customers, amounts to about 20 percent in July 2011.

In November 2009, the EPC introduced the SDD Core and the SDD Business to Business Scheme. As of mid 2011 about 3,900 banks, representing more than 80 percent of SEPA payments volume have signed up to SDD Core. Of those, about 3,300 banks also adhered to SDD B2B. Market uptake however remains marginal: According to the ECB SDD indicators, in July 2011 the share of SDD Core, as a percentage of the total volume of direct debits generated by bank customers, amounts to one percent.

The migration to the SEPA payment schemes at national level is coordinated by the National SEPA Committees in the seventeen-euro countries. These committees generally include representatives of the national banking communities, the National Central Bank, the Ministry of Finance and, most importantly, customer representatives. In several EU member states good progress as regards the transition to SEPA was achieved by mid 2011.

OVERSIGHT OF PAYMENT SCHEMES

The Governing Council of the ECB approved the oversight approach and oversight standards for euro payment instruments. The EPC scheme management function with regard to the SCT and SDD Schemes is subject to oversight based on the principles of the ECB's Oversight Framework for Credit Transfer Schemes and Oversight Framework of Direct Debit Schemes.

OUTLOOK: FORTHCOMING EU REGULATION ESTABLISHING MANDATORY DEADLINES FOR MIGRATION TO THE SEPA PAYMENT SCHEMES

The scene is set to bring SEPA to its successful migration. It is now up to EU lawmaker to provide planning security to all market participants by setting a clear deadline for migration to the SEPA payment schemes.

As confirmed by the findings of a study requested by the European Commission in 2007, the benefits for bank customers inherent to the SEPA harmonisation exercise are contingent upon swift migration to a single set of SEPA payment instruments by both the demand and the supply sides. The EPC recognises the value of setting a deadline for migration to SEPA services. An end date for phasing out legacy euro payment instruments creates awareness, ensures planning security for all market participants and confirms the commitment to making SEPA a reality. In line with expectations expressed by EU Finance Ministers, the European Parliament and the ECB, the EPC believes that end dates must be set for the phasing out of existing national euro credit transfer and euro direct debit schemes to ensure that the high costs of running multiple payment schemes in parallel can be eliminated.

In December 2010, the European Commission published a proposal for an EU Regulation establishing technical requirements for credit transfers and direct debits in Euros. This proposal is commonly referred to as the forthcoming 'SEPA Regulation'. The EPC appreciates that the European Commission proposal unequivocally clarifies that "full integration of the payment market will only be achieved once Union-wide payment instruments replace completely the national legacy instruments". The proposal states, in part, that credit transfers will be carried out in accordance with this Regulation twelve months after it comes into force; direct debits shall comply 24 months after it comes into force.

The European Parliament and the Council of the European Union representing EU Member States during the first half of 2011 reviewed the European Commission's proposal. In a next step, the European Parliament together with the European Council and the European Commission will engage in a dialogue on this forthcoming legislative act which is expected to be adopted end 2011 or early 2012.

THE IMPACT OF THE EMPOWERMENT OF THE EUROPEAN COMMISSION ON THE ISO STANDARDS

The proposal of the Regulation will empower in art 5.4 the European Commission to amend the rules and standards of the Annex of the Regulation, in which the technical requirements of the SEPA Rulebooks and Implementation Guidelines are mentioned. This empowerment is according to the European Commission required "in order to take account of technical progress and market developments" and are planned to take place by delegated acts for an indeterminate period of time.

The EPC and many members have expressed strong concerns on this empowerment of the European Commission. It may lead that the European Commission will decide on changes to the business rules of the SEPA Rulebooks (the master agreements between the scheme participants) and/or on the mandatory ISO standards of the Implementation Guidelines for the bank-to-bank space or the recommended ISO standards of the Implementation Guidelines for the bank to customer space. The impact of this Regulation on the ISO standardisation process is not yet clear at this stage. What is clear is that public regulation may intervene in the private standardisation process of business rules and ISO technical standards for SEPA. ●

For more information on the EPC and SEPA visit the EPC Website at www.epc-cep.eu.



ISO20022 in Payments – A Brief Update

By Thomas Egner, *Payments SEG Convenor*

Whenever goods are moved globally, services are contracted or securities are traded, every process results in a payment. Although some payments are effected in cash, i.e. notes, coins, and checks, the vast majority in transaction volume and value is done by using electronic payment instruments such as credit transfers, direct debits or card initiated payments.

Differences in local and regional practice and requirements, however, present challenges to standards and their users. And, belief in the oversimplification that “a payment is a payment” has compounded chaos. SEPA is perhaps the best current example of payment harmonization across multiple markets, bringing standards, legal regulations, and business processes to a common pan-European process. Other regions or initiatives such as IPFA are about to think how the SEPA development can be copied and how an increasing cross boarder/continent demand could be dealt with.

Supra-national companies have very specific treasury requirements, both for payables as well as for receivables. Their wish for the banking industry was, and remains very clear: establish a common, globally preferred standard and rules for cash management. EDI and more specific EDIFACT addressed needs from a standardization point of view. However, experience shows disappointing results in the adoption to the established framework. This problem remains to this day.

Now, with ISO20022-compliant XML messages, things have changed. SEPA is requiring that XML messages be used by banks and corporate iEurope. In addition, an underlying legal and business framework was established, as already included something which lacked in EDIFACT.

Backed by the SEPA framework, other than the traditional payment instruments (e.g. cards) or business lines of credit (e.g. securities) look at using the defined XML payment messages for their needs – and begin to formulate requirements and functionalities not being taken care of by today’s schema definitions. In parallel to this – and also based on the SEPA requirements (which originally only address mass or batch payments) – the usage of XML in High Value Payment systems (HVPS), such as TARGET2 or EURO1 is discussed in Europe. It also appears, that the XML messages could provide solutions for the new en-

hanced data requirements set out by some communities on HVPS and other High Value Payment Systems around the globe – such as the Zengin System in Japan – already have made the step towards XML or are about to investigate this process (e.g. Canada).

All this sets the framework for describing the PaySEG operations. The group, for the sake of a stable version, deferred all 2011 change requests (CRs), leaving important requests to be implemented in the 2012 version of the standard. The requested CRs resulted mainly because other industries now intend to use payment functionalities, such as cards or securities. In order not to change the schema, which would have an impact for all users, the group discussed the implementation the concept of “Supplementary Data”. This would leave the payment data unchanged; however individual user communities could define additional data for which they are individually responsible. Use of the data needs to reach agreement in a user-community. The second major block of changes results from implementation experiences. This would either be weaknesses in the design of the messages (content) or structural improvements (design). An example for the second type could be the implementation of the Business Application Header (BAH). By using the BAH, users can find processing relevant data in a specific block at the beginning of the message – without the need of parsing through the complete file. Results are better performance in message processing.

The increasing use and activities around the XML formats also leads to the implementation of additional services (e.g. CAI/VAI, eBAM, Real-Time-Payments), helping the XML-message family not only to provide end-to-end capabilities, but also realize scenarios providing additional service and value for the users.

Of course, some topics need further attention, such as a potential market migration strategy towards the XML message family. This, however, is a discussion mainly to be led by business groups. The task of the PaySEG is, to provide a sound and stable message basis for such a migration. This could lead to major changes at the beginning of the life-cycle of a message, thus assuring practicability, usability and acceptance over time.

Exciting times! ●

Report on the Securities SEG

By Kevin Wooldridge, *Securities SEG Convenor*



Last time I wrote for the ISO 20022 Newsletter, I predicted a storm of change in the following months. That storm duly arrived, and I'm glad to say that we weathered it rather well.

Five evaluation teams have been called upon, to evaluate 10 new securities messages and to consider 115 change requests. We have also been asked to comment on two new Business Justifications, and to consider the need for a new reporting message.

We have also supported work on the Business Application Header, and the RA's work on refactoring the business model.

Much of this work came to a conclusion in October.

It seems appropriate, then, to start with a snapshot of where the Securities SEG lies in respect of the various evaluations in which we are participating, or will be at some point in the future. For a full list of Business Justifications, please go to www.iso20022.org.

SUBMISSIONS

- **Securities Pre-trade and Trade** (FPL and SWIFT): This message is currently on hold. FPL has completed the mapping from FIX messages to the ISO 20022 model. The possibility to retro-fit changes from the post-trade matching work into pre-trade is being considered.
- **Total Portfolio Valuation Statement Reporting** (ISITC): The messages have been approved by the SEG.
- **Securities Post-trade** (Omgeo and SWIFT): The first set of messages has been approved by the SEG; further messages will be evaluated in due course.
- **Alternative Funds** (SWIFT): In development, expected 2012.
- **Securities Settlement Modification/Replace & Alignment Response** (SWIFT): The messages (plus one from T2S) have been approved by the SEG.
- **TARGET2-Securities** (T2S) (Deutsche Bundesbank on behalf of 4CB and SWIFT): In Development, not expecting further submissions until 2012.
- **CCP Clearing** (SWIFT and FPL): In development, expected 2012.
- **Collateral Management** (SWIFT, FPL, ISDA/FpML and ISITC): In development, expected 2012.
- **Investment Fund Prospectus** (ANBIMA): In development, expected Q4, 2011 earliest.

- **Securities Management Accounting Book-Entry Instruction** (ISITC): On hold, investigating the possibility to use 'supplementary data' instead.
- **Standing Settlement Instructions for Securities, Payments and FX** (ISITC, Omgeo, and FPL): Business Justification awaiting RMG vote.

During July, we received change requests for Investment Funds, Settlement & Reconciliation, and Corporate Actions. This year we employed a leaner process, which was clearer and reduced the number of passes for each change request.

For Investment Funds, 53 change requests were received. Many of these involved the globalisation of some processes that had been created purely for the UK market, and are now being picked up elsewhere. This can only be a good thing. Most of the change requests were approved, but, in order to facilitate the migration of order messages to ISO 20022, many changes were put on hold until 2017. Eventually, 22 changes were approved for implementation in 2012.

For Settlement & Reconciliation (S&R), 15 change requests were received, from a wide range of markets, including Japan, Australia, Brazil, and T2S. In addition, three changes were introduced by SWIFT. After the usual robust discussion, 14 changes were approved, although many were amended in the process. The possibility to skip maintenance for 2012 for S&R only was discussed, but most felt it would be of no benefit unless Corporate Actions (CA) was also skipped, which would not be the case.

For Corporate Actions, 39 change requests were received. Of these, 10 were rejected, 2 were partially rejected, and 2 were withdrawn, leaving 25 approved. As usual, the vast majority of the changes were to do with the announcement message, with requests for new event types, and additional indicators. In addition, 8 'Common' change requests were received.

The final Maintenance Change Request documents have been reviewed by the SEG. We now await the final updated ISO 20022 repository components.

So it has been a busy few months. The hard work put in by our volunteer standardisers often goes unnoticed by the rest of the industry, so I would like to extend my thanks to everyone who has attended the various calls and put in the work.

ISO 20022 Registration Authority is Kept Busy

By Jean-Marie Eloy, ISO 20022 Registration Authority

Since the May 2011 meeting of the Registration Management Group (RMG) and up until October 2011, the Registration Authority (RA) has taken care of the submissions described below, making sure that the registration process is timely followed by the various actors and that the ISO 20022 website at www.iso20022.org is kept up to date accordingly.



300 APPROVED ISO 20022 MESSAGES

Between 11 May and 11 October 2011, the following message definitions were approved by the Standards Evaluation Groups (SEGs) and/or published in the Catalogue of ISO 20022 messages:

- **New version of Securities Settlement & Reconciliation (SWIFT – 29 messages)** Published on 31 May 2011.
- **New version of Corporate Actions messages (SWIFT – 13 messages)** Published on 17 June 2011.
- **Securities Post-trade Matching (Omgeo/SWIFT – 5 messages)** Approved for publication on 3 August 2011.
- **Securities Settlement Instruction Modification, Allegement Response and Audit Trail (SWIFT – 4 messages)** Approved for publication on 7 October 2011.
- **Total Portfolio Valuation Statement Reporting (ISITC/SWIFT – 1 message)** Approved for publication on 7 October 2011.

On 11 October 2011, there were 300 approved ISO 20022 message definitions.

NEW BUSINESS JUSTIFICATIONS AND CHANGE REQUESTS

As per ISO 20022 procedures, the RA receives new Business Justifications (BJ), Change Requests (CR) and Maintenance Change Requests (MCR) and checks them for compliance with the approved 'templates' before submitting them to the RMG or SEGs.

Between 11 May and 11 October 2011, the RA received two new Business Justifications (BJ), 86 Change Requests (CR) which resulted in 4 Maintenance Change Requests (MCR) to be implemented in the 2011/2012 maintenance cycle:

- **BJ – SSI for Securities, Payments and FX (ISITC, Omgeo, FPL – 2 messages)** Received on 14 June 2011. Approved by RMG on 30 September 2011.
- **BJ – Factoring Services messages (ASF – 11 messages)** Received on 26 July 2011. Forwarded to RMG for vote by 31 October 2011.
- **MCR – Investment Funds Maintenance 2011/2012 (SWIFT – 16 messages)** Approved by Securities SEG on 1 October 2011.
- **MCR – Payments Maintenance 2011/2012 (SWIFT, ISTH, CBI, GUF – 58 messages)** Partially approved by Payments SEG on 4 October 2011.
- **MCR - Securities Settlement and Reconciliation Maintenance 2011/2012 (SWIFT – 29 messages)** Approved by Securities SEG on 7 October 2011.
- **MCR – Corporate Actions Maintenance 2011/2012 (SWIFT – 13 messages)** Approved by Securities SEG on 7 October 2011.

Change requests are shown in the ISO 20022 Catalogue of Change Requests.

The following Business Justifications were withdrawn by Euroclear on 1 August 2011:

- Securities Registration and Holder Identification
- Market Claims and Automatic Transformation
- Securities Issuance

NEW ISO 20022 WEBSITE

The RA is working on revamping the www.iso20022.org website. The new website is expected to be available around the end of the year.

STATUS OF ALL ISO 20022 SUBMISSIONS

The status of all submissions is kept up-to-date on www.iso20022.org. The table on the following pages illustrates the situation on 11 October 2011. ●

300 ISO 20022 APPROVED MESSAGES (27 BJS)

RA I.D.	Submitting Organization	Submission Name	Status	Date
1	SWIFT, IFX, TWIST, OAGI	Customer to Bank Credit Transfer Initiation	3 new versions of message definitions registered and published	17 Apr 09
2	SWIFT	Investment Funds Distribution (1)	67 new versions of message definitions registered and published	30 May 08
13	SWIFT	Investment Funds Distribution (2)		
3	SWIFT	Exceptions and Investigations	17 new versions of message definitions registered and published	17 Apr 09
4	SWIFT, IFX, TWIST, OAGI, ISITC	Bank-to-Customer Cash Management	3 new version of message definitions registered and published	17 Apr 09
5	SWIFT	Direct Debits	2 new version of message definitions registered and published	17 Apr 09
6	SWIFT	(Single) Credit Transfers	5 new version of message definitions registered and published	17 Apr 09
8	SWIFT	(Bulk) Credit Transfers		
7	SWIFT	Trade Services Management	50 message definitions registered and published	7 Jul 08
12	SWIFT	Proxy Voting	8 new versions of message definitions registered and published	10 Mar 10
14	CBI Consortium	Invoice Financing Request	3 message definitions registered and published	16 May 08
15	CLS	Forex Notifications	15 message definitions registered and published	9 May 07
16	Euroclear	Issuers' Agents Communication for CA	22 message definitions registered and published	23 Dec 08
24	SWIFT	Securities Transaction Regulatory Reporting	4 message definitions registered and published	23 Aug 07
27	SWIFT	Securities Settlement & Reconciliation	29 new versions of message definitions registered and published	31 May 11
28	SWIFT	Securities Corporate Actions	13 new versions of message definitions registered and published	17 Jun 11
31	French SWIFT Users Group	Change/Verify Account Identification	3 message definitions registered and published	18 Dec 09
32	SWIFT	Fund Processing Passport Report	2 message definitions registered and published	27 Nov 09
34	SWIFT	Payments Mandates	4 message definitions registered and published	19 Aug 09



RA I.D.	Submitting Organization	Submission Name	Status	Date
36	SWIFT	Bank Account Management	15 message definitions registered and published	27 Apr 10
35	CBI Consortium	Creditor Payment Activation Request	2 message definitions registered and published	7 Oct 10
22	UN/CEFACT TBG5	Financial Invoice	1 message definition registered and published	1 Dec 10
45	SWIFT	Cash Account Reporting Request and Notification	4 message definitions registered and published	15 Jan 11
20	EPAS Consortium	Cape – Acceptor to Acquirer Card Transactions & POI Terminal Management	first 18 message definitions registered and published	10 May 11
21	Omgeo and SWIFT	Securities Post-trade	first set of 5 message definitions approved	3 Aug 11
11	ISITC	Total Portfolio Valuation Report	1 message definition approved	7 Oct 11
41	SWIFT	Securities Settlement Modification/Replace and Allegement Response, T2S Audit trail	4 message definitions approved	7 Oct 11

29 CANDIDATE ISO 20022 MESSAGES UNDER EVALUATION (1 BJ)

10	FPL & SWIFT	Securities Pre-trade and Trade	29 candidate message definitions submitted to SEG	19 Dec 08
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OTHER CANDIDATE ISO 20022 MESSAGES (14 BJS APPROVED BY RMG)

43	SWIFT and FPL	CCP Clearing	10 candidate message definitions reviewed by RA before pilot	15 Nov 10
49	FPL, FpML, ISITC, SWIFT	Collateral Management	13 candidate message definitions reviewed by RA before pilot	15 Nov 10
42	Deutsche Bundesbank (on behalf of 4CB) and SWIFT	TARGET2-Securities	75 candidate message definitions reviewed by RA before pilot testing	2010-2011
9	SWIFT	Cash Management	BJ approved by RMG	4 Nov 05
19	IFX Forum	ATM Interface for Transaction Processing and ATM Management	BJ approved by RMG and endorsed by SEG	24 Nov 08
37	SWIFT	Alternative Funds	8 candidate message definitions reviewed by RA before pilot testing	3 Oct 08
44	ISO/TC68/SC7/WG9	Acquirer to Issuer Card Messages (ATICA)	BJ approved by RMG and endorsed by SEG	13 Oct 09

RA I.D.	Submitting Organization	Submission Name	Status	Date
47	National Bank of BE (on behalf of FI, LU, NL, IE, CY, LV central banks)	Cash Lodgement and Withdrawal	BJ approved by RMG	15 Mar 10
50	Payments Council Ltd - UK	Real Time Payments	BJ approved by RMG	30 Jun 10
51	Berlin Group	Card Clearing Payment (CCPAY)	on hold	18 Jul 11
52	ANBIMA	Investment Fund Prospectus	BJ approved by RMG	15 Jul 10
56	TWIST and SWIFT	Bank Services Billing	BJ approved by RMG	15 Jan 11
53	SWIFT	Demand Guarantees and Standby Letters of Credit	BJ approved by RMG	30 Apr 11
58	ISITC, Omgeo, FPL	SSI for Securities, Payments and FX	BJ approved by RMG	30 Sep 11

BUSINESS JUSTIFICATIONS SUBMITTED FOR APPROVAL

46	IFX, OAGi, TWIST, SWIFT	Remittance Advice Message	BJ returned to submitters with RA comments	20 Nov 09
57	ISITC	Securities Management Accounting Book-Entry Instruction	on hold	4 May 11
61	ASF	Factoring Services	BJ submitted for vote by	31 Oct 11

BUSINESS JUSTIFICATIONS REJECTED OR WITHDRAWN

18	ISITC	Securities Cash Statement	withdrawn	16 Aug 06
25	SWIFT	Payments Mandates	withdrawn	29 Oct 07
33	SWIFT	Triparty Collateral Management	withdrawn	30 Apr 11
23	Euroclear	Securities Registration and Holder Identification	withdrawn	1 Aug 11
26	Euroclear	Market Claims and Automatic Transformation	withdrawn	1 Aug 11
30	Euroclear	Securities Issuance	withdrawn	1 Aug 11

Thoughts on e-Invoicing Ecosystems

By Tapani Turunen, *Convenor ISO 20022 Trade SEG*

It is now about one year since ISO20022 finalized evaluation work for the Financial Invoice message submission. It is thus a proper time to take a look at what has happened in deployment and even more interesting what kind of developments we see in the e-Invoicing ecosystems area.

ISO20022 FINANCIAL INVOICE DEPLOYMENT

The following is not a comprehensive list, but a quick overview:

- One month after publishing the new message standard, the first press release from a leading service provider was issued announcing support and implementation of the Financial Invoice message.
- In the beginning of 2011 SWIFT published their e-invoicing Factsheet and support for the ISO20022 Financial invoice message. Several service providers and banks worked together to materialize SWIFT e-invoicing service.
- The first production connection of SWIFT e-invoicing service using ISO20022 Financial Invoice message was announced in a press release during SIBOS 2011.
- EBA announced support for new ISO20022 Financial Invoice message in spring 2011
- Service providers have begun to issue press releases for establishing interoperability connections using ISO20022 Financial Invoice.



- One large scanning and OCR provider implemented ISO20022 Financial Invoice messaging as an interface.
- At least two country level initiatives on two continents are considering applying ISO20022 Financial Invoice as their country level message format.
- ISO20022 Financial Invoice has a strong presence as an interoperability standard alternative in the new European e-invoicing service provider industry association.

There is – as can be seen – much concrete evidence of support, implementations and already launched services. One important topic is that ISO20022 Financial Invoice aligns development of new features in existing practices. A conclusion we can draw is there has been a real need in the market for this message standard.

REGULATION, STICK OR CARROT?

This question is often met in discussions about the deployment of e-invoicing and ways to speed-up its usage.

We have seen exceptionally fast deployment of e-invoicing in countries like Brazil and Mexico where it is regulated as mandatory to deliver needed information to tax authorities. Not surprisingly strict regulation leads to the most rapid deployment. However, those examples seem to leave out e-invoicing usage between enterprises and the enablement of Straight Through Processing (STP) and other process enhance-



New edition of ISO 20022

By Jean-Marie Eloy, *ISO 20022 Registration Authority*

ments. A softer grade of regulation is expected to take place in Russia where it will cover contents and means to send tax invoices to authorities, but they are not likely to make it mandatory. It remains to be seen how efficient this type of regulation is.

There are two main types of sticks currently applied. Buyers stating a requirement to accept only e-invoices (e-mail is not classified as e-invoice) are very commonly used. Its effectiveness depends very much on how strict these buyers live up to their statements. Another type is to set a price for paper invoices. This model has been used both in b2b- and b2c-invoicing and mainly in the utilities and telecommunication business sector. Almost all reported results have been very positive.

Successful carrot models do not seem to exist. We believe that the market has lost faith in their effectiveness.

SPLIT PAYMENT

The term “split payment” came from the EU Commission Green Paper on Future VAT. The model has been developed in the Real Time Economy program in Finland and consists of two parts. First all e-invoices deliver the VAT-data needed automatically to tax authorities (this could save 60 million workdays in enterprise in EU). Secondly, the invoice payment is automatically split in two parts (this can also be done for paper invoices – but is much more cumbersome). The VAT part goes directly to tax authorities and the net amount to the creditor (seller).

This model has been analyzed and it seems to work fine with e-invoicing and SEPA payments as well as with cards payments. There are obviously many benefits in the model both for enterprises and for tax collection.

When elements of this model turn towards live implementation and the automated reporting is the easy part on a national level we may also see regulated Tax Invoice requirements in EU.

We live in very interesting times with so much potential for process automation to flow from factory floors into back-offices. Once again we will be surprised how slowly changes happen in the short term and how big the impacts are in the long term. ●

The new edition of the ISO 20022 standard, prepared by ISO TC68/WG4, is in the final approval stage at ISO. It is expected to be published on www.iso.org in the first quarter of 2012, but will not be implemented until May 2013.



The new edition makes the methodology to develop ISO 20022 messages more robust and independent of UML (Unified Modelling Language). It will impact mostly the ISO 20022 Registration Authority (RA), serviced by SWIFT, which will have to adapt the RA tools as well as the ISO 20022 Data Dictionary. SWIFT will provide a brand new development tool to organisations that provide ISO 20022 messages. This tool will be easier to use than the current ‘SWS Lite’ provided by SWIFT and will be much cheaper as well since it will be a stand-alone tool not requiring the purchase of additional modelling software.

The impact on the XML Schemas used by end users of the ISO 20022 messages is extremely limited. It consists in a simpler XML design rule for the representation of ‘Choices’. The effect of this rule is to change slightly the way a choice between XML elements is represented in XML Schemas. The new rule will be implemented by the RA in May 2013, and will affect XML schemas generated for any new ISO 20022 message released as of that date, and any existing message that would need to be maintained for a business reason as of that date.

The new edition will also offer new features, such as the possibility to use a new data type format to express a time duration instead of having to indicate a start date and time and end date and time. It will be possible to use these new features, starting in May 2013, in new message development or at the occasion of message maintenance.

A full description of the benefits of the new edition will be made available on the ISO 20022 website around the end of 2011. ●

Honing the ISO 2022 Business Model

A REFACTORING WILL MAKE THE MODEL EASIER TO ACCESS AND MORE EFFICIENT TO USE

By Stig Korsgaard, *Finansraadet*

From the very beginning, ISO 2022 has aimed at establishing clear, shared business definitions across the industry. It explains, for example, what a direct debit mandate is and how it relates to an account and an account owner. The definitions of these industry concepts and their relationships have been captured and maintained over time in the ISO 2022 business model that constitutes a solid semantic model for the industry.

This year has seen a refactoring of the ISO 2022 business model. "The ambition was to bring greater simplicity and accessibility to the business model and make it more usable from a development perspective," says Stig Korsgaard, head of standards at Finansraadet (The Danish Bankers Association). "We were also keen, where possible, to harmonise across different markets and business segments, thereby reducing redundancy."

The initial idea for a reworking of the ISO 2022 business model came from within SWIFT. "Through many discussions with other standards organisations, financial institutions and regulators, it became clear that we needed to extend the content of the ISO 2022 business model beyond the scope of the ISO 2022 message definitions," says Françoise Massin, senior business analyst, SWIFT Standards.

"We found that it had been built up over the years and contained a lot of information, but much of it was derived



from the messages rather than from real business analysis," she adds. "By extending the content, we discovered that there was a lot of duplication on the one hand and information that had not been captured on the other. We wanted to make it easier for the market to understand."

Massin began rebuilding the model on the basis of the existing data and was also responsible for liaising with the relevant ISO Standards Evaluation Groups. The updated business model has now been accepted by

ISO. "We see it as a 'phase one' business model," says Massin. "We will publish it in mid November." Massin and her team are currently finalising the relationship between the message model and the business model – a process that involves tracing between the different business elements and message elements. "Once we've published it, we hope that we will get continual feedback on usage," says Massin. "We are very excited about the results of the effort. We now have a solid industry resource freshly validated by the whole industry. It will open up a lot of new possibilities: from definition of controlled vocabularies for regulators, to enterprise glossaries linked to the global standard or common semantic dictionaries across standards organisations. This new release of the ISO 2022 business model will help to further establish ISO 2022 as the unifying business standard of the industry."

As convener of the ISO 2022 Cross-SEG Harmonisation Group, Korsgaard has also played a leading role in the refactoring project. "The exercise has just been completed, so it's too soon to assess the benefits it will bring to different business areas," he comments. "Business models in general are not often something that the average user of a message standard deploys. I expect the model to be of greatest interest to professional standardisers, but if it's easier to access, interest may spread."

A session of the Standards Forum in Toronto last September was devoted to explaining how the business model could be used to structure information in banking applications along with practical examples. "The Standards Forum provided a useful opportunity to bring the potential benefits to a broader audience," says Korsgaard. "We can then look at how best to move from ambition and development to usage and implementation."

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