



## CAN YOU HEAR ME NOW? ISO 20022 connects players across the financial universe

By Gerard Hartsink

ISO 20022 is a universally applicable recipe for the development of financial industry messages designed to reach a single target (convergence) while allowing interoperability of existing message sets (coexistence). As such, ISO 20022 facilitates the creation of global data highways enabling communication between players across all financial markets. Gerard Hartsink makes the case for standardisation in the financial industry and reports on the progress of the ISO 20022 work.

### Customers’ expectations in today’s global financial market

Today, actors in the capital and commodity markets invest in equity and fixed income of any jurisdictions in any currency and hedge their trades and positions with counterparties located anywhere on the planet. Multi-country customers and multi-country financial institutions seek to use the same platforms for their transactions based on the same standards. Individual consumers transcend national borders buying goods and services via the Internet and expect a standardised solution for paying their bills.

The signs of the times are clear: it is the responsibility of the financial services industry to deliver solutions which allow smooth sailing in the modern market place. Efforts need to be intensified to put in place those business rules and technical standards that facilitate fast, efficient and secure processing of financial transactions between customers across any markets. In consequence, financial institutions and infrastructures have to upgrade their systems and services accordingly. The days of limited and proprietary solutions are over.

### ISO 20022: responding to customers’ needs

The financial industry can deliver many of its services only if there is an agreement on business rules and technical standards observed by market participants. In particular for payments, cards, securities and trade-related services customers – as mentioned above – expect such standards to be globally applicable.

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For more information on ISO 20022, consult the ISO 20022 website at [www.iso20022.org](http://www.iso20022.org) and get access to the following information:

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 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 what their status is.

The [catalogue of ISO 20022 messages](#) including the latest version of ISO 20022 messages and the archive of previous versions. In May 2009, there were 199 ISO 20022 messages and 77 [candidate ISO 20022 messages](#) under evaluation.

The ISO 20022 approach to standard setting is the answer to today's customers' needs. ISO 20022 is not only a suite of message standards but a recipe proposed by ISO to develop message standards for all domains of the financial industry. The most innovative characteristic of ISO 20022 is its modelling methodology which decouples the business standard from the physical message formats. The models evolve with the business, while the formats evolve with the technology to benefit from the latest innovations with regard to automation, ease of implementation, openness and cheapness of products. The ISO 20022 recipe offers a better, cheaper and faster way of developing and implementing message standards.

Standardisation will create value over time for customers as they will enjoy more choice, more reach and a more integrated financial process. Standardisation, however, may destroy value for financial institutions that are not prepared to upgrade their value propositions based on such new standards. Board members of financial institutions should recognise this reality.

### **Initiatives in the financial sector promoting global solutions**

The trend of goods and services being traded by SMEs and corporates in multiple markets has led to several initiatives in the banking industry driving forward the development of globally applicable solutions: the roll-out of the Single Euro Payments Area (SEPA)<sup>1</sup> is progressing based on the payment schemes and frameworks developed by the European Payments Council (EPC)<sup>2</sup>. With the launch of the SEPA Credit Transfer, European banks are leading innovation in payments being the first in the world to deploy the global ISO 20022 message standards for mass euro payments.

The European Commission estimates that the introduction of SEPA combined with the development of a European e-invoicing framework could lead to cumulative cost savings of EUR 123 billion in the area of payments and of EUR 238 billion in the area of invoicing over a period of six years – provided that both the supply and the demand sides move rapidly to these new standards<sup>3</sup>. Similar cost savings may be expected for other regions in the world if a comparable level of standardisation were to be achieved.

In parallel, a group of banks and clearing houses started the International Payments Framework with the objective to create a rulebook based on the same ISO 20022 standards. The goal is to facilitate cross border credit transfers in any currency supporting trade as well as the flow of migrant remittances<sup>4</sup>.

At the same time, efforts are underway to streamline the standards used for the processing of trades and corporate actions. The Group 30, a project launched by senior representatives of the public and private sectors, reiterated in its Global Clearing and Settlement Final Monitoring report (2006) that although progress was made as regards clearing and settlement across different national and international systems, the long-term aim remains to achieve interoperability on a global basis by using the same standards<sup>5</sup>. Market participants active in the CDS market are currently reviewing the technical standards for the clearing and settlement of this fast growing global market.

<sup>1</sup> The Single Euro Payments Area (SEPA) is the area where citizens, companies and other economic participants can make and receive payments in euro, within Europe, whether between or within national boundaries under the same basic conditions, rights and obligations, regardless of their location. The geographical scope of SEPA encompasses the 27 EU member states, Iceland, Liechtenstein, Norway, Switzerland and the Principality of Monaco.

<sup>2</sup> The European Payments Council (EPC) is the decision-making and coordination body of the European banking industry in relation to payments. The EPC defines common positions for core payments services, provides strategic guidance for standardisation, formulates best practices and supports and monitors implementation of decisions taken.

<sup>3</sup> Capgemini. SEPA: potential benefits at stake (published 2008)

<sup>4</sup> For more information visit [www.internationalpaymentsframework.org](http://www.internationalpaymentsframework.org)

<sup>5</sup> For more information visit [www.group30.org](http://www.group30.org).

## **Regulators push for open standards in the financial sector**

In the area of standardisation of financial services the public sector has an important role to play. As a major market participant on the demand side and as the regulator of financial services, public authorities are increasingly pushing for the adoption of standards supporting interoperability of services in the financial sector.

Central banks promote standardisation of payments instruments with a view to increase the use of efficient electronic payment services. As such, the European Central Bank acts as a catalyst in the SEPA process. The European Commission fosters standardisation in the securities industry to create an open capital market that will lead to interoperability and cost reductions. The Federal Reserve is an active participant in the International Payments Framework.

Last but certainly not least, competition authorities regard open standards in the area of financial services as a precondition for open market access. The European Competition Network chaired by the European Commission concluded that the ISO 20022 message standards used for the processing of SEPA transactions meet these competition requirements.

## **The ISO standard setting process is the way of the future**

ISO standards are a staple in the provision of financial services and enjoy wide-spread acceptance among customers and regulators alike. Increasingly, ISO 20022 standards are used to exchange messages between financial institutions, their customers and their market infrastructures. There are currently 200 approved financial message standards available. Examples of successfully implemented ISO standards include the IBAN (ISO 13616), ISIN (ISO 6166) and BIC (ISO 9362). The ISO standard setting process provides all stakeholders the opportunity to contribute to the development of global and interoperable standards in the financial supply chain, e.g. to create the data highways that allow communication between any players across all markets.

The trend is irreversible. So get involved and stay tuned!

*Gerard Hartsink is the Convenor of the ISO Registration Management Group (RMG).*

## **GOOD AS GOLD Creating value based on ISO 20022**

*By Robert Blair*

The ISO 20022 standard was developed in response to the financial services industry demand for standards “singularity”. Built on the base of a universal data dictionary, ISO 20022 serves as a focal point for standards developers and standards users to address the next generation of financial services messaging requirements. Bob Blair explains how the approach to standardisation encapsulated in ISO 20022 creates value in the financial services sector.

## **ISO 20022: the global answer to local needs**

ISO 20022 reflects the global nature of the financial services industry bringing together diverse commercial and financial domains. ISO 20022 creates a level playing field empowering a broad group of stakeholders including end users, providers, and enablers to express their interests in a common work product whilst

ensuring maximum transparency in the process. This cooperative and inclusive approach furthermore avoids a situation where multiple standards are developed by different groups in response to the same business need that may materialise in different areas or domains across the globe. At the same time, ISO 20022 enables the development of solutions catering to specific local requirements including support for multiple languages and character sets.

In addition, ISO 20022 is based on modern standards technologies for schema creation, publication and use, making it even more relevant and accessible. The standard is aligned with the technologies of the Internet (such as markup languages) and targeted to address increasing industry requirements for application integration.

Last but not least, the standard offers the necessary flexibility to incorporate additional requirements as it will evolve reflecting market needs.

### **ISO 20022: the roll-out**

Growing numbers of financial services users and providers are adopting ISO 20022 standards. Each additional user/supporter enhances the value of the standard and broadens its relevance. Most visible is the attention given these standards in the European payments market in the context of SEPA (Single Euro Payments Area), an effort to move from many individual, national payments systems and related standards to a single euro payment market spanning 31 SEPA countries.

The standards are equally relevant for other national (and global) payments markets as they offer a unique combination of functionality and coverage. Similarly, various categories of standards users, notably global corporations, are turning with increasing interest to ISO 20022 as a means to achieve global reach, and efficiencies in corporate to bank communications. It is up to each community, however, to determine if and when to adopt the standard as well as the appropriate implementation approach, e.g. whether a big bang is preferred to a transitional period of co-existence.

### **ISO 20022: creating value through standards**

ISO 20022 standards offer the potential to create value for their users in a variety of ways:

- Automation of manual communications, e.g. the use of the Funds messages in Singapore to bring capacity and efficiency to manual operations, for example.
- New messages/new conversations , e.g. the development and use of the Exceptions and Investigations and Bank Account Management messages by banks, corporates and others thus enabling what amounts to entirely new communications.
- Developments in the securities space such as in European securities clearance and settlement where bank to market infrastructure messaging offers the opportunity to closely communicate on position and account management.
- Incorporation of new functions and features not currently available.
- Availability of all of the above in a common, organized package.

Where standards are a community event, community members need to move as one to realize the benefits of the standards. But the standards offer opportunities to create value for those exhibiting individual initiative

as well: enabling the provision of differentiating services to end users; providing connectivity to market infrastructures; establishing efficient communications within the firm to align internal and external communications.

Standards are the foundations of commerce. ISO 20022 is laying a new foundation.

*Bob Blair is the Vice-Convenor of the ISO 20022 Registration Management Group (RMG) and of the Payments Standards Evaluation Group.*

## **THE GUIDING LIGHT**

### **ISO in financial services: turn challenges into opportunities**

*By Cindy Fuller*

ISO has traditionally been a key player in financial services standardization and will continue to shape the way these services are delivered. ISO standards empower the industry to master new challenges including but not limited to: increased M&A activity, the reality of a 24/7 service day, outsourcing operational areas, the move from the traditional brick and mortar building to electronic banking, the growth of the Internet, dependency on technology, changing security requirements and governmental regulation. Cindy Fuller predicts a busy future for ISO and advocates a unified approach to standardization going forward.

#### **What drives the services sector toward standardization?**

The way ahead for the services industries including the financial sector and thus for standardization is clear: electronic communication technology is key. For example: as an auditor must be able to “read” the transactions, so must the transactions be auditable thus standards are needed. Parties to the transaction wish to communicate electronically with less interface or manual processing standards required. As transactions become more a twenty-four by 7 day service level (24/7), standards are required in order to communicate flawlessly. Electronic communications in one form or another began in banking in the 1950’s but the Internet has opened whole new worlds in e-banking on a global basis.

The industry is rapidly moving from its brick and mortar buildings to electronic channels and e-banking. Security is a primary requirement for financial services. It is not only the movement of data from point to point that is a security risk, but the storage, archival, management and distribution of information must also be protected. Protecting and managing the ever growing levels of electronic financial data requires strong encryption, its appropriate application and defined risk management systems. The standardization process needs to anticipate these developments and be ahead of the game to deliver the solutions needed now and in the future.

#### **What have standards done for the financial services sector?**

Standards have helped the financial services companies grow from batch-oriented processes to real-time operations. Processing using automated workflow management allowed integration of systems across all tiers to obtain a single, consistent view of transaction status at any one time.

Standards have helped the industry to fully achieve global interoperability, increase the Straight through Processing (STP) of information and transactions, reduce the manual intervention and to comply with

emerging market standards. In fact, ISO TC 68 would claim that the banking and financial services industry is built upon a foundation of standards.

Standards allowed the development of the retail card transaction business, debit and credit cards, as the entire card processing infrastructure is built upon ISO standards including the “*PIN standard*” – *ISO 9564 -1: 2002 Banking – Personal Identification Number (PIN) management and security – Part1: Basic principles and requirements for online PIN handling in ATM and POS systems and transaction communication standard ISO 8583* and others.

On the securities side of the financial services business, key standards include coding standards and the numbering of the securities (ISO 6166) as well as standards that transact securities movement (ISO 15022) and form the basis for communication of information that is electronic banking. Financial industries are consumers and users of standards developed and built within other ISO communities. It is critical for these other standards bodies to recognize the unique needs of the financial services sector and other services sectors.

### **What issues does the industry face today?**

The financial services industry, like many industries delivering *services*, is faced with the constant demand to deliver quicker, better and more reliably. This pressure is a key driver of industry evolution and, as such, the evolution of standards.

A partial list of challenges affecting financial services business today includes: financial institution mergers and acquisitions, global banking/financial services expansion, non-banks offering bank-like products in competition with traditional banks, the reality of a 24/7 service day, outsourcing operational areas, the move from the traditional brick and mortar building to electronic banking, continued direction from manual processes to STP, the growth of the Internet, dependency on technology, changing security requirements and governmental regulation.

However, it is often overlooked that all of the changes mentioned can in fact be turned into opportunities if appropriate standards are available. Mergers and acquisitions, for example, are accomplished more smoothly if the merging companies have *standardized* operations. Global banking/financial services *expansion* becomes less burdensome if the organization is merging into a market where the global standards are widely applied and adopted.

### **Where is the industry headed?**

In the 1990’s, various business areas in the financial services sector launched initiatives designed to resolve specific issues regarding interoperability, processing and associated problems. However, these endeavors became increasingly complex, complicated and competitive, some would even say chaotic.

In the 2000’s, the industry reconsidered its approach and channeled its standardization energies to ISO 20022 (see [www.iso20022.org](http://www.iso20022.org)), an evolutionary standard originally borne to serve the securities industry as it moves from “flat file” or “fixed” transaction messages to a more fluid messaging direction. This flexible framework in ISO 20022 allows financial message development, registration of business requirements and definition of message sets according to an internationally agreed approach.

This *ISO 20022: Overall methodology and format specifications for inputs to and outputs* from the ISO 20022 Repository standard is the key to harmonizing financial industry standardization as this developing standard

has wider adoption possibilities. At the same time, ISO 20022 enables a unified approach to financial services standardization.

The success of the ISO 20022 recipe demonstrates the services sector's need for global solutions, e.g. broader, more open and interoperable standards. Hence, ISO is looking forward to delivering the standards needed in the financial services industry now and in the future.

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## **A FRESH LOOK AT PAYMENT STANDARDS**

### **The ISO Payments SEG operates at the core of commerce**

*By Len Schwartz*

The importance of payments systems in the area of commerce is often underestimated: payments are part of so-called convenience goods, wanted not for their own sake but as a way to access other goods and services. As the Netherlands Bankers' Association (NVB) once put it: "payments are a hygiene factor; a dissatisfier (as opposed to being a motivation factor or satisfier). This means that the nature of the services is such that a faulty provision of services leads to dissatisfaction and complaints. On the other hand, a proper delivery of services does not lead to additional satisfaction"<sup>1</sup>. This popular sentiment, however, fails to recognise the central role of properly functioning payment systems as the prime enabler of successful economic activity: payments are an integral part of virtually every financial or commercial transaction. Hence, it is crucial to define the standards needed to deliver secure, fast and efficient payment solutions. Len Schwartz reports on the agenda of the ISO Payments Standards Evaluation Group.

### **The scope of the ISO Payment Standards Evaluation Group**

The Payments SEG represents different organisations cooperating to create a "standard" for the development of payments standards; so to speak. The activities of the SEG are designed to

- Streamline communication amongst customers and their banks as well as between customers, e.g. to drive forward standardisation of payment initiation,
- Streamline communication amongst banks as well as between banks and market infrastructures, e.g. to promote the standardisation of payment processing.

The Payments SEG has more than 41 members representing Europe, Asia and the Americas. Members include banks, corporates, market infrastructures and standards organisations. The diversity of the Payments SEG

<sup>1</sup> Source: Nederlandse Vereniging van Banken, Reply of Dutch banks to the Second Interim Report on Current Accounts and Related Services, letter to the European Commission, October 12, 2006, p. 9.

has allowed the introduction of harmonized payments and bank-related standards across a wide range of sectors. Organisations participating in the SEG include IFX, TWIST, OAGi and SWIFT.

The standards space is defined by the common interests of the service providers and end users collaborating to increase efficiencies through agreement on shared elements such as business rules and technical standards. Competitive interests and the desire for market differentiation mark the boundaries of the collaborative space.

Since its inception, the SEG has addressed new common XML messages for payments, debits and reporting of account statements and transactions with a focus on the codes that represent bank transactions and payments. The work of the Payments SEG, however, is not limited to these “core” messages.” It covers eMandate (dematerialising the mandates associated with direct debits), Bank Account Mandate (or BAM, a standards-based approach to opening and maintaining bank accounts) and exceptions and investigations (or E&I, the inquiry process that surrounds payment transactions).

A major achievement of the Payments SEG is the ongoing implementation of the ISO 20022 payment schema in major ERP applications through SAP and Oracle designed to support the roll-out, for example, of the Single Euro Payments Area (SEPA). This standard has also become a factor in the planning of market infrastructures around the globe. In addition, the Payments SEG has developed Message Usage Guides (MUGs) to facilitate the implementation of ISO 20022 by providers and users alike.

### **Next steps**

Requirements for payment standards are constantly evolving in accordance with changing market needs. As a result, the Payments SEG will deliver in a next step:

1. Publication of a new version of the payment, reporting and exceptions and investigations standards in 2009.
2. Solutions addressing developments related to interoperability, variants, message implementation guides, and message transport (including Business Application Header) as identified by the ISO Registration Management Group (RMG).
3. Solutions covering new requests for ISO registration of schema for direct debit e-Mandate, bank account maintenance, and others.

In addition, the SEG is ambitious to create greater commonality in the standards used in the different communities; to facilitate standards’ ease of use and to complete standardization of the processes around the pure payment and account report.

Going forward, the SEG will continue to operate in an inclusive and transparent manner intended to engage the broad range of stakeholder groups affected by payment standards. Thus the Payments Standards Evaluation Group contributes to the smooth functioning of payments systems (a must have). One day, perhaps, the SEG might even help to overcome the above mentioned Cinderella syndrome occasionally afflicting payment standardisation (a nice to have).

*Len Schwartz is the Convenor of the ISO 20022 Payments Standards Evaluation Group.*



# SECURITIES: REVERSE ENGINEERING IN ACTION

## On the evolution from ISO 15022 to ISO 20022

*By Kevin Wooldridge*

Of the five Standards Evaluation Groups (SEGs) operating in the ISO 20022 framework, the Securities SEG faces perhaps the most daunting task: over the next few years, nearly every existing process for which there is an ISO 15022 message will be reverse engineered into ISO 20022. The three key words in this context are: coexistence, interoperability, and evolution. Kevin Wooldridge explains.

### **The scope of the Securities SEG**

There are currently 69 full members cooperating in the Securities SEG, representing 15 countries and 6 liaison organisations including experts covering the full range of instrument types, from equities and fixed income to investment funds and derivatives. The SEG covers the full lifecycle from pre-trade, trade, post-trade, clearing and settlement, account management to custody and collateral management. The SEG addresses these processes from a number of perspectives involving market participants such as brokers, custodians, transfer agents and data providers as well as infrastructures such as Central Securities Depositories and Central Counterparties. Going forward, the principal task of the Securities SEG will consist of reverse engineering nearly every existing business processes for which there is an ISO 15022 message into ISO 20022.

### **Coexistence**

Business processes based on ISO 15022 messages that require automated solutions will be reverse engineered to fit ISO 20022. Where such automated solutions are not needed, processes based on ISO 15022 messages will remain. Thereafter, the two standards will necessarily coexist, with business-driven change being reflected in both standards simultaneously. It is with an eye on this future that the evaluation teams are currently considering the SWIFT submissions for corporate action and settlement and reconciliation messages.

### **Interoperability**

ISO 20022 will seek to unify, in a single repository, processes that have traditionally used very different standards and syntaxes. In fact, a submission for pre-trade and trade messages is currently being considered by the Securities SEG and this submission is the first to propose a syntax other than ISO 20022 XML. It will undoubtedly set some precedents for future submissions.

### **Evolution**

The securities industry is evolving. No one really knows exactly what the future trading, clearing and settlement landscape will be, although nearly everyone agrees it will be different from today. The settlement landscape in particular is in a state of flux, with Target 2 Securities, Euroclear and Link-up markets all offering multi-jurisdiction solutions. There is also the potential for further change at the trading and clearing levels with activity from LCH.Clearnet, DTCC and numerous trading platforms. Instruments will no doubt continue to evolve, possibly becoming still more complex. The funds industry is seeing increasing levels of automation, and integration with other facets of the securities industry. Reference data is currently not well served by standards, although the recent Financial Instrument Business Information Model, now part of the ISO 20022 repository, is a major step in the right direction.

We can be sure that there will be increased interest in regulation, which may well lead to a need for new standardised processes.

In addition, the standard itself is evolving. So far, most, though not all, of the work that has been done by the Securities SEG has been to approve new messages. Within the next two years, this will change to also include a regular maintenance of existing messages. The maintenance process has the additional requirement of considering the effect a change will have on existing users. So the business benefit of a change must be compared to the impact it will have. The SEG will need to operate in line with other bodies, which already exist for this purpose, such as the ISO 15022 maintenance working groups supported by SWIFT.

### **Help is needed**

The Securities SEG has a full agenda, and needs the support of the securities industry to meet the demands of that agenda. The evolution in the securities industry means that we are always looking for more committed members, either to join the full SEG or to participate in evaluation teams. Anyone interested should contact one of the SEG management team, which can be found on the ISO 20022 website.

*Kevin Wooldridge is the Convenor of the ISO 20022 Securities Standards Evaluation Group.*

## **SETTING THE STANDARDS**

### **ISO 20022 for T2S**

*By Jean-Michel Godeffroy*

TARGET2-Securities (T2S) will constitute a major step forward in the delivery of a single integrated securities market for financial services in Europe, thus reinforcing the Lisbon strategy, and in particular the Code of Conduct on Clearing and Settlement and the harmonisation efforts through the Giovannini process. T2S will provide a single, borderless pool of pan-European securities, as well as a core, neutral, state-of-the-art settlement process. Market users will be able to access these assets through Central Securities Depositories (CSDs) in a way which can, where essential, accommodate national and regional differences without perpetuating them, and which already embodies agreed harmonisation measures in several key areas<sup>1</sup>. T2S is developed using the ISO 20022 modeling methodology. Jean-Michel Godeffroy reports on the work in progress.

### **A multi-currency platform based on the ISO 20022 modeling methodology**

An important area of this kind is electronic communication between financial institutions and their market infrastructures. There is an increasing pressure on the securities industry to go from proprietary national or regional standards to internationally recognised standards, and T2S recognises and will support this.

Moreover, as a major part of the fast evolving post-trade landscape, T2S also needs a very adaptable solution, capable of providing rapid answers to new business needs.

ISO 20022 serves both these needs. It is a single standardisation approach, valid for all financial initiatives requiring messaging. And it supports evolution since it is not a list of standard messages, but a modelling

<sup>1</sup> Please refer to T2S website for more information: <http://www.ecb.int/paym/t2s/html/index.en.html>

methodology which is syntax neutral, and based on design rules. This makes it robust in the face of evolution of technology and of business needs.

T2S is a European project, with euro at its heart and including other currencies such as Danish Krona, Swedish Kronor and Lithuanian Litas. T2S will be a true multi-currency platform from the outset. This adds weight to the need to adopt ISO 20022, already well understood at global level.

ISO has already approved more than 200 messages useful to T2S as compliant with ISO 20022 standard. T2S will gain substantial benefit from this work. But T2S needs more if it is to be fully in line with ISO 20022.

### **T2S message types will benefit the global financial community**

Accordingly, a sub-group of the T2S Advisory Group – composed of industry experts from the T2S user community – was set up in October 2008 to support the Eurosystem in developing message types that fulfil the T2S user requirements. The sub-group is where practicable seeking to ensure that its messages can be re-used by the global financial community.

It is working in close cooperation with 4CB (the four National Central Banks developing and later on operating the platform<sup>2</sup>) and SWIFT (as Registration Authority for ISO 20022 messages).

The sub-group has undertaken a detailed gap analysis between existing ISO 20022 messages and those needed to fulfil the T2S user requirements<sup>3</sup> before concluding that a new set of ISO 20022 messages is needed in addition to the existing standard messages for settlement and reconciliation.

ISO also offers T2S the possibility to modify existing ISO 20022 messages, and the sub-group has suggested a number of modifications. The results of this work will considerably enrich the catalogue of ISO 20022 messages potentially benefiting a large number of financial industry actors; and the Europe-wide reach of T2S will probably catalyse a rapid spread of consistent market practices across the industry.

For T2S users that have used proprietary standards so far, T2S offers the opportunity to move directly to the newest ISO standards in a consistent environment. For existing users of ISO messaging standards, T2S is the opportunity to move to ISO 20022 in a smooth fashion, and to ensure that the new ISO 20022 messages that will be developed for the purpose of T2S leverage the users' earlier investments in this field.

### **T2S – right in the heart of ISO 20022**

The Eurosystem is a great supporter of the benefits brought about by ISO 20022. To contribute to the registration process, the ECB has applied for and has been granted the status of A-liaison organisation in ISO Technical Committee 68 (Financial Services) and related subcommittee 4 (Securities and related Financial Instruments), which puts it in the right position to represent T2S at RMG meetings. This brings T2S right into the heart of ISO 20022.

*Jean-Michel Godeffroy is Director General, European Central Bank, and Chairman of the T2S Programme Board.*

<sup>2</sup> T2S will be developed and operated by the Deutsche Bundesbank, the Banco de España, the Banque de France and the Banca d'Italia, which are called 4CB.

<sup>3</sup> T2S User Requirements Document is available on <http://www.ecb.int/paym/t2s/html/index.en.html#key>

# GOING GLOBAL: THE NEW ISO CREDITOR REFERENCE

## Linking billers and payers across the globe

*By Olli Kähkönen*

ISO approved a new standard that allows creditors, e.g. billers such as insurers and telecommunication companies, for example, to automatically reconcile incoming payments with outstanding invoices. The ISO Structured Creditor Reference to Remittance Information (in short: the ISO Creditor Reference standard) further increases the rate of straight-through payments processing. Whereas similar standards have been developed on national level, the ISO standard provides for the first time a means of automatic reconciliation fit for global use. Olli Kähkönen introduces the global ISO Creditor Reference.

### **The Benefits of the Creditor Reference**

The use of creditor references is common in most countries. Studies show that in excess of 95 percent of all incoming flows have been automated based on country specific creditor references. These references allow for automatic reconciliation of receivables against outstanding invoices. Absent such standards, reconciliation would be done in a much less efficient way, for example manually, based on information such as client name, amount paid and invoice number.

Creditors and banks involved in the processing of a bill payment transaction are able to verify the correctness of the creditor reference indicated by the debtor (payer) with the payment instruction based on a unique check digit included in the creditor reference. In the area of online banking this verification generally takes place at the same time as the debtor enters the payment details.

Last but not least, creditor reference standards are the basis for close cooperation between businesses and ERP vendors, integrators and other service providers with regard to the development of efficient IT applications in the area of payment processing.

### **The global ISO Creditor Reference standard**

On account of the significant differences among existing national creditor reference standards, Finland as a member country in ISO decided to develop a new global standard featuring the best functionalities in use today. The global ISO Creditor Reference standard approved in one of the ISO Sub Committees (SC 7, Core Banking) deploys three distinct features: identifier, check digit algorithm and length of the reference. The letters “RF” have been assigned to indicate the presence of a Creditor Reference; the algorithm is the same as in the IBAN (International Account Number) check digit calculation; the length of the reference totals 25 characters maximum length. For a detailed description of the technical features inherent to the ISO Creditor Reference see links below.

### **Market Adoption of the ISO Creditor Reference**

The availability of a global ISO Creditor Reference standard does not immediately replace existing national or local creditor references. Ultimately, the adoption of the ISO Creditor Reference will be determined by market demand, e.g. whether originators of large volumes of invoices (billers) and their customers (payers) decide to use the global ISO standard. A successful roll-out will also depend on the engagement of IT providers such as ERP vendors, for example.

Initial feedback from corporate clients indicates that the new ISO Creditor Reference will be adopted in a first step for cross border invoicing as there are no overlapping procedures with existing domestic references in this area.

Banks currently offering creditor reference should therefore prepare for a period of parallel use of existing national creditor reference standards and the new global ISO standard. By contrast, banks operating in countries where no creditor reference standard is in place today might consider deploying the new ISO standard. Either way, from an ISO perspective it is recommended that banks supply the necessary user manuals and initiate campaigns to promote use of the global ISO Creditor Reference.

To further facilitate consistent implementation of this new standard, ISO considers publishing a Message Implementation Guide (MIG). Last but not least, parties engaged in the implementation of the global Creditor Reference are encouraged to share any lessons learned as well as country implementation guidelines with ISO. Until further notice, such information can be forwarded to the author of this article who will make it available to interested parties (see below for contact information). In due course, a central forum will be created for widest possible distribution of information pertaining to the ISO Creditor Reference.

Close cooperation of all concerned parties in the implementation process will contribute to making available the ISO Creditor Reference to billers and payers seeking to explore the global market place.

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For further information please visit ISO at [www.iso.org](http://www.iso.org) (standards under development) and [www.swiftcommunity.net](http://www.swiftcommunity.net) (E2E STP Creditor Reference).