ISO 20022 Newsletter

ISO 20022 Celebrates Anniversary: Five Years and Counting

By Gerard Hartsink, *Convenor*
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IN THIS EDITION

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.

The financial industry made substantial progress during the past few years with its standardization work on ISO 20022 for the benefit of customers and suppliers of financial services.

This year the RMG 20022 celebrates its five-year anniversary for the Financial Services Industry. And, everyone connected with the work of the 20022 effort can be proud of the progress made. From zero messages developed as a starting point to over 265 messages in the 20022 repository today. During this same period, the registration management group

(RMG) has grown from one representing 15 countries, to 19 countries and from 9 Liaisons to 12 Liaisons, representing all the continents. It has been a very productive 5 years!

Beginning in 2005, the RMG formed two standards evaluations groups representing the payments and securities areas. Today, we have grown to five SEGs, including:
- Payments
- Securities
- Card/Retail
- Foreign Exchange, and
- Trade Services

The SEG's membership and participation have also grown during this period as they carry out the message evaluation while the RMG manages the policy and process related to the standard.

Operating rules, production of this newsletter, and general communication of the ISO 20022 activity and standard are further reasons to reflect on what has been accomplished in a very short and historically difficult time.

As we move forward to expand world-wide acceptance for the ISO 20022, we must be mindful of the real needs of our industry. Several important projects and activities are highlighted in this issue of our newsletter. These articles demonstrate

Brazil: 15 Years of Economic Stability

By Liliane Dutra and Carlos Duarte Simões

Over the last 15 years, Brazil has made significant progress with regard to economic stability largely as a result of having implemented the inflation targeting system, adopting greater fiscal discipline, and a consistent adjustment process involving its external accounts.

Improved fundamentals have in turn contributed to increasing the resistance of the Brazilian economy to external turbulence like that which shook the major global economies in 2008, and the interest of foreign investors in the domestic financial and capital markets.

The evolution of the financial system infrastructure resulting from the restructuring of the Brazilian Payment System in 2002, and the systematic process of adopting the Basel Rules, in addition to the adoption of prudential and banking supervision rules in line with international recommendations have also contributed to attracting new investors to Brazil. This has lead to the diversification of the domestic market investment base, estimated today at US$3.3 trillion.

THE BRAZILIAN CAPITAL MARKET

The Brazilian capital market stood out as one of the most dynamic in the global mix in 2009.

In the debt market, the highlight was debenture issues: US$15.8 billion up to December (excluding leasing offers), with an increase of 209 percent over the US$5.1 billion raised in 2008. In volume, registered share offerings in 2009 totaled US$27 billion, 35 percent more than the US$20 billion obtained in 2008.

It is also worth pointing out the higher volume of big-ticket transactions, indicating the market is becoming more selective: around 80 percent of the offerings exceeded US$574 million, against 24 percent in 2007. On the external market, total funds raised were US$32.2 billion up to December 2009, of which US$26.3 billion refer to bonds and US$5.9 billion to equities. In comparison with the previ-

ous year (US$11.1 billion), the increase was 190.5 percent. Of the US$26.3 billion raised via bonds, US$4.1 billion involved Brazilian sovereign debt bonds, while US$22.2 billion represent private sector issues.

In 2008, BM&F (the Commodities and Futures Exchange) merged with Bovespa (Brazilian Stock Exchange), to create BM&FBovespa, the world's third largest exchange, with trading volume of US$16.9 trillion in 2008. Three hundred and eighty-five companies are listed for trading on the stock exchange, with a market cap of over US$1.3 trillion.

The net funds raised by the Brazilian investment funds industry was positive by US$50.3 billion between January and December 2009, with net equity under management of US$805 billion, a growth of 22.9 percent for the year.

REGULATION AND SELF-REGULATION

The banking and capital markets in Brazil are regulated by highly efficient mechanisms that render them very safe. The regulatory entities with supervisory powers in the Brazilian market are:

- BCB (Central Bank of Brazil) – a federal autonomous government entity linked to the Brazilian Ministry of Finance, with responsibility for supervising all financial institutions.
- CVM (Securities Commission) – regulates, normalizes and supervises the behavior of market players. Its normalization power extends to all subject matters involving the securities market.
- SPC (Private Pension Plans Secretariat) – a public institution whose purpose is to recognize and grant rights to those insured under pension plans. It supervises private pension funds.
- SUSEP (Superintendence for Private Insurance) – an autonomous government entity linked to the Ministry of Finance. It is the body responsible for controlling and supervising the insurance, *(continued on next page)*

open-ended private pension, special savings and reinsurance markets; and

- The Federal Revenue - (Brazilian Federal Revenue Secretariat) – responsible for tax administration and customs control.

SELF-REGULATION

The Brazilian Financial and Capital Markets Association - ANBIMA, created in October 2009, as a result of a business combination between the ANBID - Brazilian Association of Investment Banks and ANDIMA – Brazilian Association of Financial Market Institutions. ANBIMA represents 327 members, including commercial banks, multiple and investment banks, asset management companies, brokers, securities dealers, and investment advisers.

With growth in demand and relevance in 2009, the Self-Regulation area was divided into:

- **Regulation and Best Practices:** Responsible for creating new rules and the development of codes;
- **Market Supervision:** Technical area responsible for checking compliance with the rules in the codes, preparing a specific report; and
- **Organisms:** Commissions and Councils approve the reports done by technical area and open sanctioning processes in order to verify non compliance with the rules established in the codes.

INFRASTRUCTURE: BRAZIL HAS A SECURE PAYMENT SYSTEM THAT SETTLES TRANSACTIONS IN REAL TIME

The success of the "Real Plan" adopted by the Brazilian government in 1994, set off profound changes in the profile of the local financial system. The sudden drop in inflation represented a loss in revenues of around 30 percent for financial institutions as a whole. Stabilization revealed the long-term untenable position of several banks whose survival largely depended on inflationary revenues.

At the same time, the economic globalization process and a stricter monetary policy created additional challenges for the banking system, forcing institutions to adapt to an environment of greater competition, financial innovation, and tight liquidity. The significant changes in the macro-economic scenario and in the operating environment of the banking system led to greater vulnerability and the risk of large-scale banking crisis.

So, following the Real Plan, the fast-track process of restructuring the Brazilian banking system got under way. The changes were partly imposed by the market itself, with a large number of mergers and consolidations. On the other hand, the Central Bank played an active role in the process by encouraging initiatives for restructuring and strengthening the financial system, in addition to adapting it to the Basel principles.

THE BRAZILIAN PAYMENT SYSTEM

Nonetheless, the soundness of the business environment also depended on an adequately designed payment system whose role as the transfer link between payers and receivers, interconnecting the real economy and the financial institutions and Central Bank, could constitute a potential source of systemic risk propagation,

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the important contribution being made by 20022, as well as continuing activity in the international arena. Here you will find contributions of active participants of the ISO 20022 community. These contributions reflect the views of the authors, and are not necessarily ISO 20022 positions. I would like to draw special attention to the article authored by Ms. Liliane Dutra and Mr. Carlos Duarte Simoes of Brazil. The article is remarkable in that it depicts how Brazil has become one of the major economies in the world, and how that community is getting ready to implement ISO 20022.

There are many other fine articles contained in this issue. Most deal with the global financial industry regional or global needs for interoperability and messaging. Among the messaging-related articles, authors study the various developments in their sectors, apply the standard, and identify issues that still need to be dealt with.

Much remains to be accomplished in the future. Right now, however, it is time to stop, and give ourselves a pat on the back for five years of a job well done.

The challenges for the next period will be more inclusive of other stakeholders in the design process of creating standards and the communication of standards benefits to the customers and suppliers of financial services and their downstream vendors and processors. The maximum value and social benefits are only created if all market participants are prepared to implement the ISO 20022 standard. A standard that is not implemented creates no societal benefits to market participants or to our customers. ●

without the proper adjustments. Therefore the project to restructure the Brazilian Payment System, initiated by the Central Bank in 1999, primarily sought to reduce the risks associated with activities involving clearing and settlement of payments and financial assets.

Representatives of the Central Bank, associations representing the financial sector, clearing houses and banks participated in the design of the new system. The model was similar to that used by ISO Committees in which working groups comprising specialists from different segments of the financial market helped to design the operating flows, message layouts, the encryption system, network, and security requirements.

The new system came on stream on April 22, 2002, linking the financial market players and operated by Central Bank. On that date Brazil joined the group of nations where interbank funds transfers are irrevocably and unconditionally settled in real time, based on standardized XML messages, but with local coverage.

The Brazilian Payment System (locally SPB) is highly automated, with increasing use of electronic methods for transferring funds and settling obligations, replacing paper-based instruments. Greater efficiency, and above all, shorter tenors on funds transfers have become the central points in the SPB evolutionary process.

The RTGS (Real Time Gross Settlement) System is operated by the Central Bank, while DNS (Deferred Net Settlement) transactions are operated by sector clearing houses. Regarding the settlement of securities transactions, the SPB shows the same degree of automated reserves transfer. Almost all securities have been dematerialized, existing only as electronic records. The trading, clearing, and settlement systems are highly automated, while STP (Straight-Through Processing) is widely used.

INTERNATIONALIZATION

In order to draw closer to international standards, in May 2008, the Brazilian Commission for Special Studies on Financial Services and Products was created, whose remit is to involve associations and banks in contributing to Brazil's representation on Technical Committee 68 (TC 68), in addition to providing support for the technical working groups discussing matters that require specialists.

This commission, in which ANBIMA, Central Bank of Brazil, BM&FBovespa, CETIP – Custody and Settlement Chamber and CIP – Interbank Payments Chamber participate, has also worked closely with the group responsible for standardizing messages in Brazil, seeking to bring Brazilian initiatives into line with international standards, which has also meant participation by members of the Brazilian group. As a
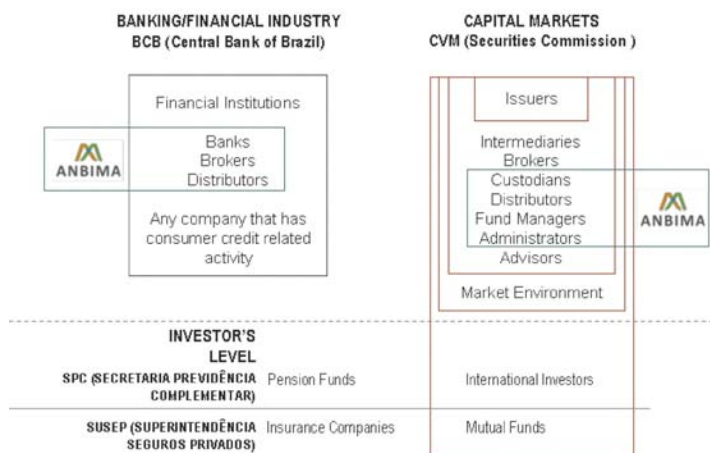
result of this work, priority was given to several activities for building on the local standard, using international standards as a reference model.

Among the group's priorities, worthy of note are: structuring specialists to provide support for Brazil's participation in the ISO 20022 Securities SEG; mapping the business involving the Brazilian Payment System, in line with the ISO 20022 standard; identifying gaps in the messages and fields between Brazilian and international standards; defining the strategy for achieving operability between the two standards; and structuring a group of specialists to provide support for Brazil to join the ISO TC68 Core Banking Subcommittee in 2010.

One example of these priorities is the decision to adopt the ISO 20022 standard within the Galgo Information Exchange System being developed by the ANBIMA and a highly representative group of capital market institutions, so as to standardize communication within the Brazilian capital market.

GALGO: THE CAPITAL MARKET INFORMATION EXCHANGE SYSTEM

In its role as representative of the Brazilian financial market, "ANBIMA has identified an opportunity for improving operating processes within the scope of the Brazilian financial and capital markets in regard to the transfer of information between participant institutions in the investment fund and portfolio segments." As this is a more specialized market, and given the significant growth in transaction volumes, the Association, through its Commissions on the Management of Third-Party Funds and Qualified

Services for the Capital Market, realized that this was the moment to propose a solution capable of increasing the efficiency of the process by using a centralized, standardized and reliable method.

Information is currently transferred between market institutions using manual interventions or non standardized stand-alone solutions.

Against this background, ANBIMA has conceived a solution involving the creation of a platform with a centralized base for making investment fund and portfolio information available, enabling control of data being sent and received, in order to ensure standardization, quality and integrity thereof in the transfer process between market institutions. A flexible solution in regard to creating and maintaining services and adaptable to the volume of information transferred, according to the needs of the market.

Thus, GALGO System was born and the process of conceiving it involved a highly representative group of capital market institutions. This GALGO system, more than an electronic mechanism, represents the adoption of a new relationship model within the sector, enabling greater integration and specialization between the agents operating in it.

The GALGO System will involve a set of services related to investment funds, managed portfolios and other instruments, bearing in mind two segments: transfers of client file and management information; and transfer of information by funds and portfolios in the assets market.

The system will enable registration of investment funds, managed portfolios and commitments for transfer; it will make available services for transferring net equity, units and asset position and post-trade services, among others, in addition to defining the standards of the information transferred.

Galgo System also promotes information exchange between the market players concerning the daily trades performed by Investment Funds and Portfolios and allows their conciliation between these institutions. Galgo performs as well electronic record data of Investment Funds and Portfolios, intending to be a reliable repository of this information.

Galgo System will offer the following services:
- Registration of Investment Funds
- Exchange of NAV and NAV units
- Exchange of Financial Instruments Positions
- Exchange of Statements and Reconciliation Reports
- Proxy Voting
- Allocation
- Pre-Settlement Reports
- Brokerage Notes
- Margin: Calls and definition
- Amounts to be settled
- Securities Lending
- Corporate Actions
- Custody Statement
- Broker Funds Registration

Expected benefits include reductions in; information transfer time, error risks and operating costs, and a guarantee of high-level security and control of access to the information available, which will imply improved quality of the data transferred. As the principal result there will be a significant drop in the risks involving the image of the institutions operating in these markets.

Initially the GALGO System is likely to offer interactions in Portuguese and English, but will be flexible to enable managers to implement new languages, given the growing internationalization process of the Brazilian capital market.

The major benefit expected of the GALGO System usage is as communication standardization, in form as much as content and financial institutions and markets integration. ●

The Coexistence Imperative

By Richard Mark Soley, Ph.D., *Chairman and CEO, Object Management Group (OMG)*

COEXISTENCE VS. MIGRATION

Discussion of ISO 20022 generally revolves around the revolution it has created. Common protocols for common business models! Finally, a transition to a single protocol. No more translation, no more "lost in translation," no more costs of translation. A world with one language, a shared language that lowers barriers to communications in electronic payments, equities, derivatives, insurance and re-insurance, perhaps even healthcare, energy trading and used-automobile pricing. Straight-through processing becomes the norm rather than something for which we struggle; shared business models with shared XML on-the-wire formats unify our world, and we become a big happy family.

Unfortunately, it's an oasis in the desert, a chimera, a ghost. It's an example of what I call the "N+1" problem, going back to my days integrating intelligent expert systems with high-performance numerical analysis engines. Back in those ancient days—in the last century even!—the IEEE conceived of a standard format (IEEE P754 was its lyrical name) for sharing floating-point numbers. As I was spending at least half of my time dealing with the complex task of translating floating-point numbers between systems, I was ecstatic. We would go from a world with N different formats, to a world with a single format! The world would be my oyster.

Perhaps it was an oyster, but one with no pearl. The reality I lived in was that IEEE P754 *joined* the world of multiple formats, rather than *replacing* that world. Instead of N different floating-point numbers being replaced with a single format, we ended up with N+1 formats, with the new P754 joining the fray. My world got just a little bit more complex. Worse, it came to me in a rush that even if somehow P754 *had* replaced all previous formats, eventually another format would have come along and we'd be back at square one—or perhaps square two, as we'd again have multiple formats, with all of the costs and maintenance overhead that entailed.

Coexistence and migration have been debated to death in our community, without a final decision. The reality is that "perfect" migration (to a single standard) will never happen, and if it did, it wouldn't last. There will *always* be need for coexistence, and it's better if we plan for it rather than hope for it.

THERE'S GOOD NEWS

The good news, however, is that ISO 20022 *did* plan for coexistence. In fact, it acknowledges it using terms other than coexistence such as Model Level Compliance, Interoperability and Reverse Engineering. From the first, the agreement to

- Specify business models in a higher-level abstract language (OMG's Unified Modeling Language®, or UML®);
- Put in place a clear process for capturing shared business models in that language;
- Automatically generate on-the-wire formats from those high-level agreed models; and,
- Allow multiple such generations (multiple on-the-wire formats),

20022 is a remarkably powerful structure. By capturing the actual business models in a high-level language, ISO 20022 enables *business analysts to in effect design interoperability messages*. This is an amazing feat, one not equaled by any of the predecessors or contemporaries of ISO 20022. Further, the high-level specification of ISO 20022 allows all sorts of other artifacts of interoperability to be generated:

- Through a process called Model-Driven Architecture®, UML models can be used to completely and automatically generate program code and code skeletons to simplify the process of dealing with UML-defined messages (such as ISO 20022 messages);
- Likewise, automated test-case generation (for regression testing and acceptance testing) can be, and is routinely done by UML users worldwide in the fields of software, systems engineering, process control, business analysts and other fields;
- Systems can be fully simulated from UML models, resulting in visual acceptance of those models by the business analysts and executives whose businesses require them. This is a remarkably powerful

> **AUTOMATED TRANSLATIONS CAN BE GENERATED FROM SHARED BUSINESS MODELS, WHEN THERE ARE IN FACT MULTIPLE SYNTAXES FOR THAT BUSINESS MODEL.**

way to ensure that a business model actually carries out the transactions expected by those that designed the model; and,

• Automated translations can be generated from shared business models, when there are in fact multiple syntaxes for that business model.

This last point is the focus of my thesis. It's not really a very technical point; in fact, we can use the simple metaphor of human (spoken) languages. All human languages express essentially the same ideas; whether I say *blue* in English, or *azul* in Spanish, or *aoi* in Japanese, I am expressing the same concept. How do we deal with translation between human languages? Why, with dictionaries of course. There are of course matters of grammar too—that's the main complication in human language translation, especially when various grammatical concepts don't translate at all (for example, the *subjunctive case* of Latin tongues is essentially gone from English; and the critical *particles* of Japanese never existed in Western languages). The other major complication for translators is of course the inherent ambiguity in human languages; while it makes translation delightful for those of us interested in linguistics, it causes no end of havoc in international affairs.

COMPUTER LANGUAGES ARE DIFFERENT

Fortunately, computer languages—whether programming languages, database description languages, or on-the-wire interoperability protocols like ISO 20022's XML syntax—are *not* ambiguous. We require them to have quite precise meanings, especially when there is money riding on the result. So once we remove the overhead of ambiguity from language, we are left with the problems of grammar and vocabulary (dictionary). In the Information & Communications Technology (ICT) world, we call these syntax and semantics.

And we know how to deal with them; since the dawn of the Information Age we have been doing so, with technology variously called interpreters and compilers.

That's not even the best news—the best news is that it's the *business models* that are standardized in ISO 20022, *not the protocols*. That means we already have shared semantics, a shared dictionary of ideas that we can use to translate from one language (on-the-wire protocol) to another. All we need is a way to specify

• Translations between concepts (through that shared dictionary); and

• The structure of messages that need to be translated (the syntax).

It turns out those are not particularly difficult to provide, once we have a shared set of business models, leading us to that shared dictionary.

ENTER MDMI

The Unified Modeling Language that underlies ISO 20022 was the result of a hard-fought consensus in the ICT industry to share a single language for specifying concepts and the relationships between those concepts. This effort was carried out in the late 1990's at the Object Management Group™ (OMG™), an international, not-for-profit consortium of more than 400 ICT end-users and vendors, universities, research institutions and government agencies that wanted to drive down the costs of ICT by providing simpler, more comprehensive integration and interoperability between systems. The choice of UML by ISO for the ISO 20022 standard is one of the many thousands of vindications that UML has enjoyed over the years.

By itself, however, UML would not provide the coexistence that we crave for financial

services messaging (and which I hope I have convinced you we need). As above, we must have a shared dictionary and a shared way to specify message syntax, or grammar. In the first decade of this century, OMG focused on extending the concepts of UML to a standard called the Model-Driven Message Interoperability™ (MDMI™) standard, to solve this problem.

The MDMI open standard defines "maps" that enable transaction data transformations. These maps are computer readable and unambiguously define and preserve the business payload (content) of any financial message regardless of its original protocol. MDMI has these four technical pillars:

1. Separation of data structures from business meaning – this assures repeatable maps.
2. Appropriate granularity for semantic interoperability – this assures reliable business information.
3. Hardened technology using Model Driven Architecture (MDA) – this assures openness.
4. Reuse and support of existing financial services and technical standards – this assures lowest adoption costs.

BEYOND COEXISTENCE: INTEROPERABILITY

So far we've focused on the coexistence problem that has received so much attention. As much as MDMI is a solution to the coexistence problem, it potentially has a larger benefit in what I call the interoperability problem.

ISO 20022 has revolutionized the way the banking community shares models, enabling them to achieve the benefits of interoperability. Just as ISO 20022 can generate message formats from its shared models for the financial industry, other industries are doing the same with their message formats from their shared models. Examples of other communities following in these footsteps are healthcare,

MDMI CAN DELIVER THE FOLLOWING BENEFITS:

- Assure legacy and new message coexistence and interoperability.
- Support for computer readable maps published by existing financial standards organizations.
- Increase quality and reliability by using repeatable, testable, measurable maps.
- Eliminate the time consuming, expensive and error prone approach of bilateral mapping by allowing the owner of a message to only understand their message format and the industry standard dictionary.
- Eliminate the retooling requirement for organizations that are using internal message formats.
- Assist migration to ISO 20022 using existing messaging standards and formats.
- Enable creation of reusable data dictionaries.
- Simplify and hasten introduction of new financial products while dramatically reducing costs of modifying existing messages.
- Leverage global OMG IT vendor community who provide UML compliant tools.
- Create a way of interconnecting networks of financial value exchange, mixing protocols or expediently and safely creating new message formats.

insurance, rail transportation, and many others.

To achieve automated and high quality end-to-end business transactions, just like in coexistence, information in one message format will need to be moved into a different message format. This is the interoperability problem, moving information from one shared model with a specific message format into a different shared model with a different message format. The adoption of MDMI will provide not only the ability to address the coexistence problem, it will also provide a platform for enabling interoperability across multiple domains that can lead to faster, more agile, higher quality, end-to-end business transactions.

NEXT STEPS
The OMG MDMI Standard has been approved by OMG. OMG even initiated an OMG MDMI Consortium to vet the standard to ensure it meets the diverse needs and requirements for the ISO 20022 community. OMG has been working with members of the ISO TC68's WG4 in order to encourage the inclusion of language in the ISO 20022 standard similar to what is present for OMG's UML specification; that the OMG MDMI Standard is a solution for standards bodies, central banks, banks, and vendors to address the issue of message co-existence by whatever term you wish to use: message coexistence, message interoperability, Model Level Compliance, or reverse engineering.

MDMI significantly contributes to the reduction of risks and costs originating from the use of multiple message protocols. In addition, it offers a solid platform of real semantic interoperability, which will be the basis for further innovative improvements. And finally, as with all standards, the value of MDMI increases dramatically as more and more MDMI maps are developed and used. OMG is confident that MDMI can deliver this great value to the banking community. ●

On the way to ISO 20022 for Payments and Cash Management Services

By Martine Brachet, *Head of Interbank Relationships of Société Générale Group*

ISO 20022 is defined as the ISO Standard for Financial Services Messaging. It describes a metadata repository containing descriptions of messages and business processes, and a maintenance process for the repository content. The first syntax supported for messages was XML Schema. All this is machine readable and easy to implement by all relevant players.

In 2000, the vision was that the whole financial industry would implement the new ISO based standard and migrate away from the existing industry standards such as SWIFT MT's, FIX, FpML and domestic formats.

CURRENT SITUATION

Is ISO 20022 today widely used in financial services? What is the current situation?

The ISO 20022 message portfolio is growing: more than 200 messages have already been approved. Moreover, there are several large infrastructure projects which have already gone live like Target2 interactive functions, EBA Euro1 interactive workstation, EBA STEP2 SCT[1] and MPEDD[2] and CLS, while other projects are under development like the Target2 Securities cash transactions (see page 18).

Despite its international nature, ISO 20022 adoption is finding particular support within the Single Euro Payments Area (SEPA). Indeed the SEPA data formats are a valid subset of the global ISO 20022 message standards. From an international point of view, ISO 20022 can be seen as driven by the European Union regulators and cornerstone of the Single Euro Payments Area (SEPA).

It should be noted that there are regional drivers such as China and Japan (2016 horizon for ISO 20022 adoption) for the BRIC+ and South Africa. SWIFT is also progressively deploying ISO 20022 linked to some corporate user driven initiatives.

To sum up, ISO 20022 is under adoption by several players in the financial services market including banks, payment systems, CSDs, central banks, corporate clients, vendors, among other end users. The fact that the versions of the messages are now quite stable is an important factor for greater global adoption.

REMAINING ISSUES

What are the barriers for a global adoption?

First of all migration costs may discourage stakeholders in their migration to ISO 20022. Maintaining two systems until broad adoption will be expensive. Furthermore the development of the new *extension concept* has to be taken into account as this could have an impact on migration and maintenance costs if it is not properly managed by the RMG 20022.

A positive aspect of ISO 20022 implementation is that the key stakeholders have been actively involved in the maintenance of this standard. Moreover, the standard sits firmly with the control of International Organization for Standardization (ISO), in close cooperation with the United National Centre for Trade Faciliation and Electronic Business (UN/CEFACT) agreeing to support the same data repository.

On the technical side, the XML syntax also helps the payments process through improved monitoring and visibility or transparency from both an originator and beneficiary perspective. This syntax reduces manual labor costs associated with software development and the maintenance exception process.

WHERE DOES ISO 20022 GO FROM HERE?

There is no doubt that ISO 20022 has been recognized as a potential global standard. However the question remains when and how will the financial sector definitively move to this international standard?

We are convinced that ISO 20022 is a basis for partnership which facilitates market harmonization and therefore reduces development, implementation and maintenance costs even if ISO 20022 might not immediately replace existing standards. ●

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1. SCT= SEPA Credit Transfer
2. MPEDD= Multiple Purpose Euro Direct Debit

Is ISO 20022 an XML standard?

By James Whittle, *Head of Standards, UK Payments Ltd.*

Many people in our industry are under the impression that the ISO20022 standard is focused only on the use of the XML syntax, or that 20022 is an XML standard. This is a mistake because ISO20022 is much broader than many believe. Furthermore, there seems to be some confusion that ISO20022 is a standard that businesses would implement. They would not. Businesses will implement the messages that have been registered via the Registration Management Group (RMG); using development processes set out by the ISO20022 standard (see www.iso20022.org). If you like, this process is similar to other industry standards (International Bank Account Number (IBAN) for example, where what is being implemented is not the standard itself but a result of applying the standard. In this respect what ISO20022 establishes is nothing more than a complex method which can be tuned to produce a range of message standards using various technologies — not just XML.

In fact, over the past 18 months it has become clearer that ISO20022 XML messages are not suitable for the entire industry, and that forcing ISO20022 adoption based on these XML messages would limit both the take-up and the pace of migration. The reason for this is that in certain markets, where message latency (size) is critical, they have concluded that it is not appropriate for them to adopt ISO20022 XML. Furthermore the stakeholders in these same markets are actually unwilling, or challenge the business case for migration. These markets have concluded that research shows the current ISO20022 XML syntax is not suitable for certain business processes they support and represent. The reasons for this are the size and structure of messages, as well as the syntax itself.

Discovering this fact triggered an investigation, the result of which is the basis for this article. The first realisation is that the real business value of ISO20022 is not the message technology, XML or other technologies for that matter, it's actually the collaborative ISO process by which the industry, and adjoined stakeholders can define global business requirements in a uniform and standardised way. These requirements in the form of business models, messages, and data elements are then stored and maintained centrally in the ISO20022 repository. To further underline the value of this centralised process it has helped the industry achieve terrific progress towards the goal of standards convergence; a goal which is central to the long-term success of the standard. It has been recognized that this goal can be advanced more rapidly and efficiently if the standard is flexible enough to allow for alternative syntaxes under the ISO20022 process. This inclusive approach allows a wider cross section of stakeholders to benefit, whichever message technologies they chose to implement.

The downside of this liberal approach is that great care must be exercised to ensure that different message technology implements the same business concepts (from the repository) in the same way; a cornerstone for semantic interoperability. The challenge is that it would be unrealistic to expect that a range of message technologies would implement the repository concepts in precisely the same way. This is because each technology imposes certain restrictions or allows certain discrete choices. The analogy is language; where words with the same *(continued on next page)*

> THE FIRST REALISATION IS THAT THE REAL BUSINESS VALUE OF ISO20022 IS NOT THE MESSAGE TECHNOLOGY, XML OR OTHER TECHNOLOGIES FOR THAT MATTER, IT'S ACTUALLY THE COLLABORATIVE ISO PROCESS BY WHICH THE INDUSTRY, AND ADJOINED STAKEHOLDERS CAN DEFINE GLOBAL BUSINESS REQUIREMENTS IN A UNIFORM AND STANDARDISED WAY.

meaning are written differently and have their own grammar rules depending on the language. This fact does not prevent clear communication, so long as the rules and spellings are documented and understood. Similarly under ISO20022 these nuances should not be a concern so long as they are understood, well documented, and carefully managed. To begin with, any request for alternative syntaxes must first be supported by a clear business rationale, which the Registration Management Group (RMG) is responsible for approving. As mentioned, the type of rationale will depend upon the need of the user, but it may stem from the need to maintain a minimal message size in applications where low latency is required, for example in near real time systems.

Furthermore, once an alternate syntax is approved by the RMG, the submitter must also provide technical documentation which will specify how the requested alternative syntax is constructed based on the ISO20022 repository. This step is vital because it will ensure a precise, repeatable, and accurate transformation from the repository to the alternative syntax. This process will most likely require a degree of re-engineering of the alternative syntax itself; meaning that changes will most likely be required to align existing messages with the repository. Once the transformation documentation has been verified by the RMG Technical Support Group, compliance would be granted and the messages produced can be branded as ISO20022 compliant, suffixed with the term 'using a domain specific syntax'.

Expanding the ISO20022 process in this way is a fantastic opportunity to leverage the standard and the repository. In fact this expansion strengthens the standard by making it more inclusive of a wider range of operational models and business environments. Larger communities of users can achieve ISO20022 compliance, while at the same time preserving, largely intact, investments in their non XML based systems. The expansion to permit alternate syntaxes is especially prudent given current economic pressure on development budgets. However, being realistic achieving compliance of existing alternative syntaxes will not occur without investment, it is simply the fact that the investment will be considerably less than changing entire systems, and their interconnections to become fully XML based. ●

Trade Services Standards Evalution Group (SEG)

By Tapani Turunen, *Convenor, Trade SEG*

Activities in the Trade SEG have been reasonably quiet since completing the approval of the Trade Services Utility but e-invoicing is rising on our horizon and it is expected the Trade Services SEG, in partnership with the Payments SEG, will begin evaluation of the e-Invoice submission of TBG5 Finance Spring 2010.

Aspects of e-invoicing standardization are currently being debated among a range of global stakeholders including corporate clients, public administrations, law makers, service providers, and standards organizations. The European Commission has just completed a two year exercise to identify and hopefully reduce the key barriers towards adoption of electronic invoicing. Paramount within the European Commission's recommendations is the development of standards to convey invoice data between the actors in a supply chain. In this article we address some of the emerging issues and remind the reader that common cross-industry cooperation matters are already well documented by the RMG in the ISO20022 presentation materials available on www.iso20022.org.

UN INVOLVEMENT

Fortunately, the United Nations body responsible for trade facilitation, the (UN/CEFACT) has recently completed a standardization efforts and produced the Cross Industry Invoice (CII for short). What the CII represents are the data structures and business definitions for a comprehensive invoice standard which meets the needs of multiple industry sectors. As one might imagine, this is a great achievement for UN/CEFACT and the fact that the CII contains over 10,000 data structures proves how much development effort has gone into defining the CII reference model. Unfortunately, this solution is not entirely compatible with ISO20022.

WHAT DOES THIS HAVE TO DO WITH THE TRADE SEG'S WORK?

Under the Trade SEG there is a mission to develop an ISO20022 e-invoice which would be based on the CII reference model. Taking the output of the UN/CEFACT process, XML and data components, which are not compatible with ISO20022 and reverse engineering them so they can become a part of the ISO20022 repository. This action, of aligning core data structures between the two international standards, will help ensure interoperability between standards when they are utilized in the physical supply chain and the financial supply chain.

ISO TC68 has already successfully undertaken a similar reverse engineering exercise for payment data defined in ISO20022; working with UN/CEFACT to see it incorporated in the UN/CEFACT repository. Obviously defining ISO20022 compatible payment related data within UN/CEFACT trade standards is critical because suppliers expect to get paid; and banks want the option to use UN/CEFACT data in ISO20022 payment messages. It is beneficial for banks when initiating payments for corporate users if they can use UN/CEFACT trade standards and easily map it into the dominant format for the financial services industry (ISO20022). However, the payment process is just one dimension e-Invoicing supports and from the corporate users perspective other requirements shall be addressed as well. In general our industry is able to provide a range of valuable services to customers based on invoice data and processing. The fact that not every customer or service-provider will need, or provide, all of these possible services should not prevent us from being able to see the overall benefit case. For example our industry is in an excellent position to facilitate e-invoicing for a huge small and medium enterprise (SME) sector.

E-INVOICE IMPACTS THE PHYSICAL AND FINANCIAL SUPPLY CHAIN.

Clearly the invoice is a critical trade document, it is often called the link between the physical and financial supply chain. Among other information the invoice should contain the necessary data to initiate a payment, and that's why the finance group of UN/CEFACT, called Trade and Business Group 5 (TBG5), has been working with UN/CEFACT to align, as far as possible, the CII in this regard. However the implementation of e-invoicing is much more complex both legally and operationally than a simple case of a supplier electronically invoicing a buyer

and the buyer initiating a payment. Such is the complexity that there is a thriving commercial service provider market. The extent of the services these suppliers offer varies but several such services are operated by stakeholders in the financial services industry.

One typical and quite common model in this industry is that the service provider acts as the intermediary between the supplier and buyer; often where the supplier is quite a different size of organization compared to the buyer. In these arrangements the service provider can, quite often, be legally empowered to create the invoice message on behalf of the supplier and communicate it to the buyer. Using ISO20022 in this environment will be attractive to service providers that may already have adopted ISO20022 for other aspects of their business. It's a proposition based on operational consolidation and efficiency which also extends benefits out to some customers

More broadly within our industry there is also work underway to define a common collaborative e-invoicing service, which would seek to join up service providers within a scheme type environment. Like any other scheme it will need to establish in detail agreed message formats and business rules. Within our industry we have a great deal of familiarity and trust in ISO20022 as the basis for this collaborative work, and ISO20022 has a track record second to none in this type of environment. It therefore seems natural that our industry would want to define an ISO20022 e-invoice, which is why TBG5 submitted, and had approved by the RMG for 20022, a Business Justification for this purpose.

Recently events like the conclusion of the European Commission work with the publication of the CII standard have increased awareness of the e-invoice standards. It might seem odd that TC68 plans to develop e-invoice messaging, since the e-invoice is considered a document of the physical supply chain and not in the scope of financial services. Invoice data is at a crossroads of the different business processes and links physical and financial value chains so that it is necessary to be pragmatic and keep interoperability in mind. In this regard the fact is that the standards UN/CEFACT produce are not the same as, or even remotely similar to what ISO20022 produces. It is unlikely that either standard will align itself with the other internationally so one must accept that the two will coexist, making sure where the two standards are likely to come into contact with one another, thorough implementation, that business data contained in both standards is compatible.

IMPLEMENTATION OF THE E-INVOICE

Compatibility will be achieved by the TBG5 e-invoice work. The TBG 5 CII will deliver a practical and international e-invoice standard in our financial industry domain which aligns with UN/CEFACT invoice data and combines the existing trade data already in the ISO20022 repository. Approximately 80 percent of the business data which will form the e-invoice for ISO20022 is already in the ISO20022 repository. Most of the business data was derived from a combination of the trade services submission by the liaison member SWIFT and the invoice financing submission from the P member Italy. It is important to realize that the definition of trade data in ISO20022 is not a new phenomenon. In fact a further advantage of the TBG5 to ISO 20022 e-invoice submissions is that it will coherently combine the existing trade data into a business model which will further align it with UN/CEFACT.

It is understandable that some not close to this work may have had concerns that what ISO20022 was doing contradicted the recommendations of the European Commission (EC) or in some way undermined the UN/CEFACT CII standard, this is not the case. The EC recommended that CII become the "...common reference semantic data model upon which future e-invoice content standard solutions are based" and ISO20022 is one of those content standards so this process furthers the desires of one region of users and providers. ISO20022 and UN/CEFACT are complimentary solutions and ongoing work is positioned to take care of alignment and ensure interoperability. Current practice confirms without a doubt that our industry has an important role interconnecting SMEs and consumers within a common interoperable framework. Pragmatically speaking ISO20022 content standards can remarkably increase the speed of this development. Surely the important fact is that the business data will align and that at its simplest this is a discussion about message format, where our industry wants to stick with ISO20022 XML messages as a way to leverage investment in systems built to process ISO20022 messages. ●

One Company's Experience With ISO20022:
A Case History

By Irene Mermigidis, *Clearstream Banking*

Clearstream successfully achieved a substantial reduction in the cost of implementing ISO 20022 MX for fund messages with the use of processable standards definitions. The firm now looks for greater savings by exploiting the full potential of ISO 20022 MX with solutions that further automate standards implementation.

Clearstream's business depends on the automated exchange of precise and unambiguous information with its customers. Electronic messages based on ISO standards go a long way towards making this possible. But global standards alone are not enough. Every market in which the firm operates is subject to slightly different regulations, and each has its own local market practices that change over time with the emergence of new regulations and business requirements. Clearstream's business processes also continually evolve as a result of an ongoing drive to offer the best possible service to its customers. Adding to this complexity, the underlying standards themselves change on a more or less annual basis. Like other financial institutions, Clearstream devotes significant resources every year to managing standards changes, modifying our own systems and message implementations, and providing tailored message usage guidance and implementation support for our customers in each market. However, Clearstream's experience in Funds underlines the market potential of gaining efficiency through ISO 20022 adoption and inherent automation opportunities of process able standards.

THE CHALLENGE FOR STANDARDS IMPLEMENTATION AND MAINTENANCE

Until recently, standards projects were largely manual efforts – and relatively labor intensive. In the past the firm used a traditional software development approach. Starting from the annual standards release documents – each running to hundreds of pages – our project would follow a series of well defined phases: requirements analysis, solution definition, design, build and test, internal and customer readiness. At each stage, specifications, test-cases and inter-nal and external documentation were produced and manually cross-referenced with the requirements identified in the analysis phase. This was particularly labor intensive, because the details of the standards were only available in document form; each section of which needed to be carefully reviewed for changes. For each distinct market we had to produce separate guidelines, ensuring that each complied with both local market practice and the necessary changes identified by our standards analysis.

TOWARDS STANDARDS AUTOMATION

A better solution was needed. ISO 20022's choice of XML as the physical representation (i.e. the syntax) of standardized ISO 20022 messages made a new approach possible, based on machine-readable XML message definitions – in the form of XML schemas. Using a generic XML development tool, our analysts were able to capture analysis information directly in the schemas. Because the schema format was processable, this information could then be fed straight into many of the downstream processes, including the production of customer documentation. The ability to reuse analysis automatically from one project phase to another, without having to track and cross-reference manually, had a dramatic effect on productivity. Using XML schemas to capture and document requirements, specifications and user documentation, and employing where possible a tool-based approach, considerably increased our efficiency.

FURTHER PROGRESS

This was a significant result, and the company team was satisfied with the progress they had made. But XML schemas do not define the whole standard, only message structures, and then for only one particular release at a time. What had become clear though was that more automation would be possible – if only more of the standard was available in a processable form. As an early adopter of ISO 20022, Clearstream was in regular contact with the SWIFT Standards Department, keen to share *(continued on next page)*

insights and explore ideas for its own benefit and that of the community. A recurring theme throughout these conversations was the need for process able standards information. As developers and submitters of the messages used by our company, SWIFT, as the Registration Authority of ISO 20022, maintains the electronic source of the standard. Prompted by this experience, SWIFT used this source material to develop a prototype standards automation product, the SWIFT Standards MX Repository, aimed at delivering rich standards definitions in a machine-friendly format. As our analysis continued, the company's analysts decided to further refine their approach by leveraging a pre-existing set of specialist XML tools, designed specifically for developing messaging standards. The combination of the SWIFT-supplied standards automation product and these specialist tools was powerful, dramatically increasing productivity (see graphic).

By implementing this refined combination, we were able to capture all the information required to document our market-specific requirements on top of the global standard. From it we can automatically generate complete customer documentation and web-based test facilities that enable our customers to check standards compliance before embarking on costly integration tests.

THE FUTURE

Significant advantages have already been gained from repository-based standards. However more automation can still be achieved. Processable standards information can be used to track the ongoing evolution of messages, highlighting those areas that require development attention from one release to the next. With the right tool support, this capability will further reduce the analysis effort required to accommodate standards changes by exploiting the automated reuse of analysis results from previous releases. Clearstream
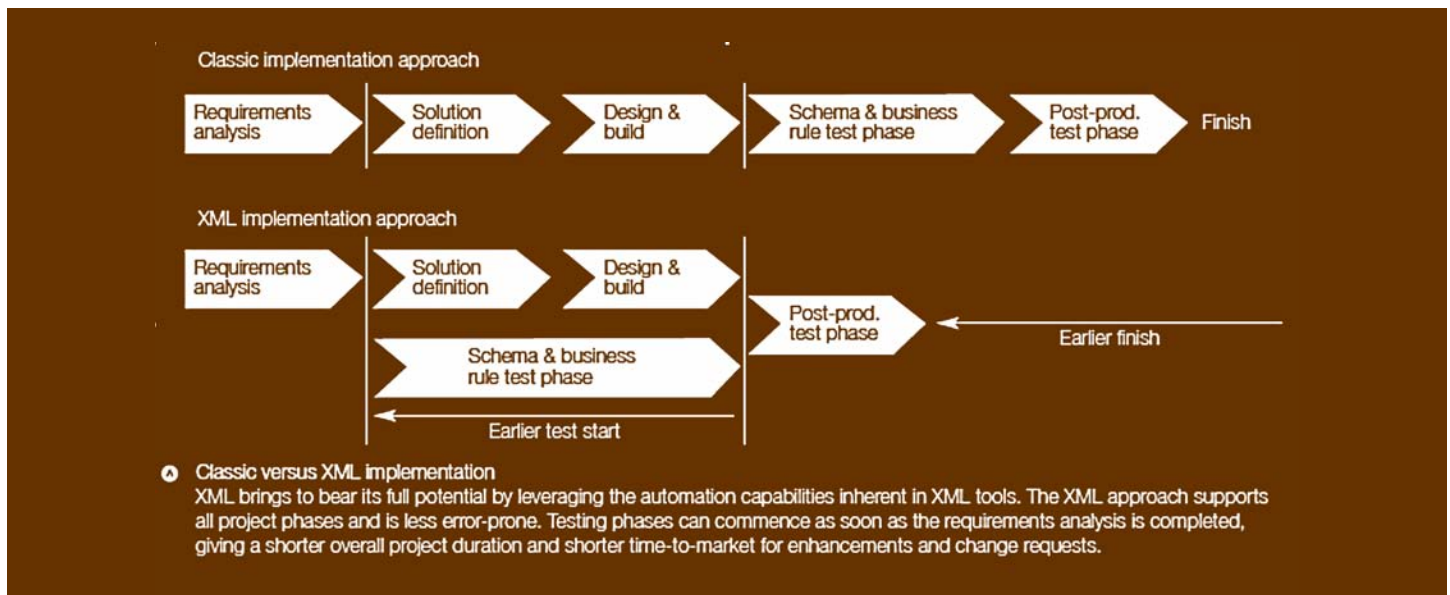
estimates that an optimal combination of machine-readable standards information and the next generation of standards automation tools will reduce the overall project effort for maintenance releases significantly; a challenge and an opportunity for our firm, SWIFT and XML tool providers alike. The company uses this data, in the form of enriched XML schemas, to produce customized processable documentation for its own and its customers' use, and a custom message validation service that allows customers to test their implementations early in the development process.

SOLUTIONS

Clearstream is pioneering the automation of standards and has already derived significant business value from its investment:

- substantial long-term cost reduction and sustainable long-term efficiency gains through reduction in project duration and resource effort
- flexibility and ability to respond quickly to customers' needs
- simplified implementation process via advanced automation tools
- optimal support for customers in XML standards implementation

Through its optimized implementation approach, Clearstream empowers its customers to tap into the benefits of XML messaging. With the financial community expanding the roll out of XML message standards into other business areas (securities clearing and settlement, cash processing, custody, proxy voting, etc.), the value proposition of the standards automation will be multiplied, ready to unleash its full potential for sustained, long-term efficiency gains. ●

Classic versus XML implementation
XML brings to bear its full potential by leveraging the automation capabilities inherent in XML tools. The XML approach supports all project phases and is less error-prone. Testing phases can commence as soon as the requirements analysis is completed, giving a shorter overall project duration and shorter time-to-market for enhancements and change requests.

Speaking the Same Language: ISO 20022 and Language and Character Set

By Bob Blair, *Vice Convenor, ISO 20022 RMG*

A successful conversation between two people requires a common language. As with people, systems require alignment of communications capabilities for an accurate, and effective conversation; one that is definitive, complete and on topic.

Written language requires use of various character sets. An agreement on the character set to be used is a prerequisite to successful communication. For example, the English language requires the Roman language alphabet. Sometimes more than one character set may be used with a given language. For example, the Mandarin language can be expressed in traditional or simplified Chinese language character sets while the Japanese language makes use of multiple character sets including the Katakana language.

Use of the appropriate language and character set is essential to successful communication, whether verbal, written, or electronic, for example between:

1. the remitter and the beneficiary in a payment communication (or banks of account and clearings/payment system operators for that matter), or
2. the custodian and the asset holder in a securities transaction.

It is essential that the parties to a shared communication share a common language and character set.

In a European context the problem of character set is perhaps more limited but nonetheless challenging. Most European languages use a common/near common character set. And where they do not, conventions have been established to translate non-Roman language alphabet to Roman language alphabet equivalent.

SUPPORT FOR LANGUAGES

ISO 20022 supports use of "all" languages and character sets through the use of UNICODE/UTF-8 encoding. The ISO 20022 schema (for payments, securities, trade finance, cards, and foreign exchange) is designed to be a common language or be shared across correspondents regardless of character set used by parties to the correspondence.

Selection of correct character set for domestic transactions is usually straightforward. All parties typically use the same "local" character set. Character set is assumed to be that used with the local language. The situation becomes more complex where multiple character sets are supported in a domestic context. For example, beneficiary name on checks in Hong Kong may be expressed in English using the Roman language alphabet. Beneficiary name on a HKD check may also be expressed in traditional Chinese language. What (and who) determines the choice of character set? The check writer's preference, and their knowledge of and responsiveness to the beneficiary's character set preferences

While character set may be obvious to two parties communicating via a SWIFTNet FIN, use of character sets in the new space occupied by ISO 20022 is not always so obvious among the many new implementers of the standard. What are the character set issues related to implementation and use of these standards?

Some questions recently raised by implementers of these standards illustrate the issue:

1. Is the documentation available in my language?
2. What character set(s) does ISO 20022 support?
   - a. For freeform text?
   - b. For external codes?
   - c. For tags?
3. What character set is required for a given set of correspondence? How do I determine the appropriate character set to use?
   - a. For Fedwire?
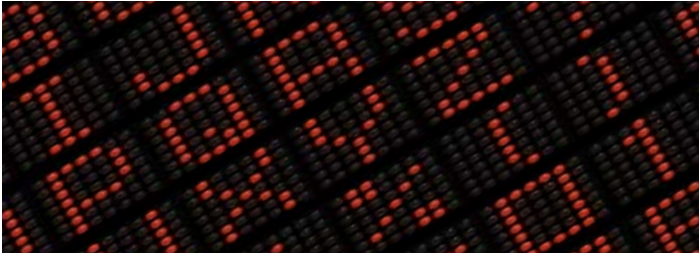   - b. For CNAPS?
   - c. For SEPA?

There are of course answers to these questions:

Q. Is documentation available in my language?

A. The language of ISO 20022 and its documentation is English. ISO national standards bodies may adopt and translate the ISO 20022 standards to facilitate national banking community access to the standard.

Q. What character set does ISO 20022 support?
A. ISO 20022 supports UTF-8 which allows expression of essentially all of the characters used in the world today. Certainly Roman alphabet, simplified and traditional Chinese, Arabic, Thai, Korea, Greek, Japanese among others are all supported.

USING STANDARDS

Q. How well are these answers documented and understood?
A. Incompletely.

Q. Is there room for clarification and improvement?
A. Certainly.

The character set issue is one area where standardizers can contribute to the understanding of the standards. And through better understanding we can foster and facilitate the standard's adoption.

Above are some of the technical issues. An additional series of issues relates to what character sets are supported by individual parties in communication. And how do communications involving multiple parties make use of characters. Is it the obligation of the sender to send only those characters supported by all further parties to the communication? Is it expected of the receiver that they accommodate all characters received, or to translate those characters they do not support.

These issues would benefit from better communication through establishment of best practice (e.g. market practice). For example, would it be beneficial to encourage publication of the character set(s) supported by each payment systems operator, clearing, and CSD? Perhaps guidelines or standards work to the obligation of senders and receivers in the community.

An agreement on language and character set is essential to successful message(s) exchange. The ISO20022 RMG has recently considered the issue of language and character set. As a result of this review the RMG plans to conduct outreach to parties such as Securities Market Practice Group (SMPG), Payment Market Practice Group (PMPG), and ISO Technical Committees (TCs) with an interest in the issue. ●

SWIFT ON CHARACTER SETS AND LANGUAGE IN MT/MX MESSAGES

For an example of how one organization has handled the character set issue, see below for excerpts from a SWIFT document regarding use of local language and character set on the SWIFT network.

MT MESSAGES

- What character sets can I use in an MT message?
  All fields must use characters from the X, Y or Z character set … It is important, incidentally, to distinguish character sets from languages, as there is no unique relationship between them.
- What are the X, Y and Z character sets?
  The X-character set is based on the set of characters that can be transported over telex.
  The Y-character set is equivalent to the EDIFACT level A character set.
  The Z-character set is a combination of the X- and Y-character set, plus @ and #.
- What language can I use in an MT message?
  It is strongly recommended to use English in MTs. A Closed User Group (CUG) – or another bilateral/multilateral agreement, typically for domestic traffic – can use a different language, but this should be agreed explicitly.

MX MESSAGES

- What character sets can I use in an MX (ed: InterAct) message?
  The default character set for MX is Basic Latin …
- But I thought UNICODE / UTF-8 was the ISO 20022 (UNIFI) standard's character set?
  The UNICODE character set, encoded in UTF-8, is indeed the official ISO 20022 character set. … SWIFT added a rule to restrict the set of allowed characters for free text XML elements to Basic Latin (see above). This will protect customer applications from receiving unwanted characters and character sets. The SWIFT network will not validate this rule.
- What language can I use in an MX message?
  English is strongly recommended to be used in MXs. A Closed User Group (CUG) – or another bilateral/multilateral agreement, typically for domestic traffic – can use a different language, but this should be agreed explicitly.

EPC (European Payments Council) - On Character Sets and Language in SEPA Messages

T2S in Quest of a Standardised Approach Regarding the ISO 20022 Standard

By Marc Bayle, *T2S Program Manager*

In the July 2009 20022 Newsletter, the interdependencies between the T2S project and ISO20022 were presented. This article will bring more insight on the progress made with building the message catalogue of T2S, and how standards will be used within T2S. The second part of the article will present the views of T2S on the issue of coexistence.

METHODOLOGY TO BUILD THE T2S MESSAGES CATALOGUE

To fulfil the user requirements of the T2S platform on a message perspective, an analysis was performed studying gaps between the functions needed by user requirements and the availability of messages in the ISO20022 repository. This analysis has resulted in a three pillar approach:

First, for a majority of functions required in T2S, (settlement instructions, status messages…) the ISO20022 repository has furnished a strong base to begin the work. However, even if the global function is covered by an existing message, slight adjustments are still needed because of specificities such as the addition of specific references that have enriched the existing repository through the submission of Change Requests. (Corporate action reference, Market Infrastructure reference are two examples). A sure sign of support, the enhancements suggested to the community in 2009 for the benefit of T2S were largely approved.

Second, as all functions cannot be covered by the existing repository, new messages have to be created as an on-going process. But since not all of these represent an interest for the using community, they have been split in two distinct categories. The first category of new messages will be included in the ISO20022 repository through the ISO registration process, the second are proprietary messages. These messages could also be ISO registered at a later stage since their development follows the ISO20022 methodology.

All this process is closely monitored by the T2S Message Standardisation Sub-Group (MSSG) that gives insight and guidance as representative of the market players and future users of T2S. (CSDs, NCBs, Banks…) To the largest respect,

T2S develops its set of messages in accordance with the market practise rules. The first version of the UDFS1.0 will provide the market with an exhaustive catalogue of messages and their particular use in T2S; it should be available in 2011 according to the current planning assumptions.
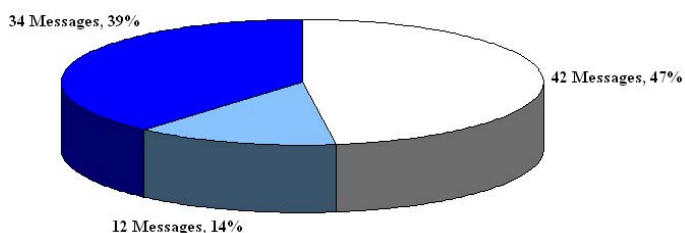
COEXISTENCE

From the beginning the T2S Project team, the 4CB and market participants (through the Advisory Group) have been great supporters of the ISO20022 Standards, T2S messages and data model have been built around it. The User Requirements approved by the AG clearly reflect the will of the T2S community.

The T2S Interface shall use ISO 20022 as its single standard for all communications, both inbound and outbound. (T2S.12.040)

While the T2S community has been, and remains a strong supporter of ISO20022, clarity is still needed as to who is ready to move fully to ISO20022 at

ALL THIS PROCESS IS CLOSELY MONITORED BY THE T2S MESSAGE STANDARDISATION SUB-GROUP (MSSG) THAT GIVES INSIGHT AND GUIDANCE AS REPRESENTATIVE OF THE MARKET PLAYERS AND FUTURE USERS OF T2S. (CSDS, NCBS, BANKS…) TO THE LARGEST RESPECT, T2S DEVELOPS ITS SET OF MESSAGES IN ACCORDANCE WITH THE MARKET PRACTISE RULES.

Legend:
□ Pillar I - Existing Standard
▨ Pillar II - New Standard
■ Pillar III - T2S Specific

34 Messages, 39%
42 Messages, 47%
12 Messages, 14%

the time of launch and when ISO20022 will become the main standard (duration of the coexistence). It is our understanding that the topic of coexistence will be discussed in the coming months by market participants.

For T2S, uncertainty on that issue poses a project risk. Should a coexistence period be necessary for the long term, T2S will face additional costs. First, this adaptation effort puts pressure on the foreseen delivery date of the whole product; second it will increase the cost of maintenance for adaptations that would evolve in the future combined with the operational risk associated to a migration of an operating system to another messaging standard under the full format.

The T2S project teams need to make a decision rapidly in order to cope with the tight project planning, but this decision has to be taken with a full awareness of the coexistence period envisioned by the participants. A clear view and a commitment from the market on an end-date of this coexistence period would be welcomed to take the right decision.

The way to implement the ISO20022 Standards is a big step for T2S and its future community as it will guide the IT systems developments within the CSDs and directly connected participants using the platform, it is also a big step for the entire ISO20022 community as it will send a strong signal in favour of the new Standard.

Target2-Securities will be delivered in a few years from now and will be the settlement platform for a large majority of the European players; it will obviously cause a complete reengineering of the participants IT systems and is aiming at being a long term settlement system; for all these reasons and the ones described earlier in the article we believe that implementing the unrestricted ISO20022 format as of the first day of operation is the right move to make. ●

What Customers Need Regarding ISO 20022

By Martine Brachet, *Head of Interbank Relationships of Société Générale Group*

The number of corporate customers using ISO 20022 is increasing even if the industry is waiting for additional input from the banking community to complete migration to ISO 20022. In this context, one has to be reminded that customer to bank Implementation Guidelines have already been published. Moreover, translation services are generally offered by banks in order to issue coexistence between legacy standards and ISO 20022 messages.

Corporate clients may indeed use ISO 20022 to integrate core treasury, payable, and receivable applications with their suppliers, buyers, and banking partners. This enables them to definitely eliminate costly, risky and resource-intensive processing in implementing harmonized and straight-through processing (STP) by relying on ISO standard messaging.

Some corporate clients are participating directly within ISO 20022 adoption. Some initiatives are present at the international level: e.g. SWIFT SCORE where a large number of companies have already been integrated.

In France, the banking community is cooperating with the Treasurer's association in order to deliver the relevant pieces of information which are needed to help corporate clients migrate from the legacy formats (CFONB) to ISO 20022 messages.

However the question remains: does ISO 20022 answer the needs of corporate clients?

First of all, before any investment, companies usually define a business case. Factors which are taken into account may include: new business requirements, reduction of production costs, and systems renewal among others. Indeed the main issue for companies is: should I do my business in a more efficient way and if possible at a cheaper price?

Indeed, clients are still waiting for additional business features regarding ISO 20022 messages like a multiple "personal digital signature" capacity which will be supported by SWIFT as well as by advanced private electronic certificates.

The French National User Group (GUF – Groupement des utilisateurs de SWIFT en France) has elaborated customer to bank and bank to customer Implementation Guidelines for SEPA Credit Transfer and SEPA Direct Debit and also provided template contracts for corporate customer to bank relationships.

Some additional features may be of interest for corporate clients and their banks. This includes among others: the new "Modification Advice and Verification Identification Information" messages which enable a bank to inform a counterpart of the change of a client's bank and/or account identification, or can be used to ask a bank to verify one of its bank and/or account identification. Furthermore, Electronic Bank Management account (EBAM) messages are currently under the validation process. ●