Dear RMG Members:

Since the 2008 Helsinki meeting, the RMG pursued a “Meet the Market” program where RMG members carved out time for host countries to invite local financial institutions to attend briefings on the ISO 20022 standard, as well as provide RMG attendees with information about their financial activities. This exchange has proven a valuable educational tool where host firms and central bankers learn and anticipate what might be needed to implement the ISO 20022 standard, and, in turn, learn about progress being made locally by invitees in their areas of expertise.

Our recent meeting in Tokyo saw more than 100 participants attending a briefing on the benefits of adopting ISO 20022. Our RMG group also learned about the new developments, state of the business, and what is progressing in Japan, (see article titled in part ‘Meet the Tokyo Market’) as well as throughout Asia. This recent experience triggered several articles from members of the RMG on practices employed in Southeast Asia that may be included under ISO 20022. As example Singapore’s standards body “SPRING” provides this issue of 20022 Newsletter with an account of practices used in the Securities area. In addition, author Amod Dixit has joined the RMG representing Singapore and has volunteered to serve as Vice Convenor of the ISO 20022 Securities SEG.

(continued on page 3)
During the ISO/TC 68 and SC plenaries in Tokyo in May 2010, we had roundtables over three days with domain specific agendas addressing Securities settlement, IT, and Payments. Every evening more than 70 persons of the international delegation from throughout the world, with national members of Japan’s mirror committees met to share experiences related to the opportunities and challenges surrounding the ISO 20022 standard. Highlights of these deep, meaningful, and lengthy discussions follows:

PAYMENTS
An update was provided regarding the ISO 20022 implementation in Japanese Banks’ Payment Clearing Network (Zengin-net) set to go live in November 2011. We also had opportunities to listen to the insightful perspectives of our financial services buy-side partners, notably the corporate treasurer of Fujitsu who commented on the importance of standards and the challenges presented by diverse implementations of standards and the proliferation of standards.

One of the hallmarks in the retail payment arena in the Tokyo Market is the exciting and rapidly developing area of mobile payments on the high-profiled NFC (Near Field Communication) architectures. We learned about the future direction of such retail payments presented by Sony heading the NFC Forum, together with the backing of new legal infrastructures i.e., the Payment Services Act just enacted a few weeks ago in Japan presented by NTT Data.

SECURITIES SETTLEMENT
We received updates of an ISO 20022 securities implementation scheduled in 2014 by JASDEC (Japan Securities Depository Center, Inc.), along with an insightful analysis related to efforts of ADB (Asian Development Bank) to achieve Giovannini-equivalent message standardization in the Asian bond markets, accompanied by a needs analysis for standardization in the securities market space thus far highly fragmented among the Asian countries, as reported by ADB.

INFORMATION TECHNOLOGY
Lead architects from Nihon Unitec and Hitachi presented on the exciting challenges and potential of XML messaging from the perspective of the non-technical business person. We also received insightful input on better collaboration with our ISO 20022 XML and XBRL syntaxes presented by Fujitsu delegation XBRL, Japan.

Thus far the most serious problems in Asia is the lack of the availability of local character sets in ISO 20022 messages raised by the PMPG (Payment Market Practice Group) member, which was followed by extended discussions on the complex and varied topics in the TC68 plenary where a study group was formed to further develop the issue.

THANK YOU AGAIN
The meetings closed with appreciation stated by all to one another, but most particularly to ISO/TC 68 Japan as our successful and most gracious host!

On behalf of all the national members in Japan, I would like to express our gratitude for your kind attention amid the jet lag and an ambitious agenda.

Highlights From “Meet the Tokyo Market” May 2010
By Takahito Yamada, RMG Member Delegate for Japan
ISO 20022 Securities Standards: Asian Perspective

By Amod Dixit, Director, Transaction Banking, Standard Chartered Bank
(Vice Convenor of ISO 20022 Securities SEG)

Asia is undergoing securities industrial revolution. Asian countries are diversified from each other in terms of demographic, language, economy & political climate and in varying stages of economic development and reforms. Asian markets are at different stages of their evolution. At the one end of the spectrum you have a nascent market like Vietnam and other end of the spectrum you have a mature and open financial centers such as HK, SG, JP & Aus. Trading deregulation, economic growth, activity in the local funds market, and the rapid expansion of wealth management and private banking services have seen securities trading volumes grow at unprecedented rates over the past three years. We have also seen arrival of dark pools into Asia. Foreign investors have started exploring their presence in Asia significantly in the last two to three years, attracted by the local market opportunities at a time when the U.S. and European markets are slowing down.

But growth has exacted its price, in the form of unprecedented shortages of skilled securities personnel; operating cost is going up, at a time where margins are shrinking in other parts of the world as markets slow down. No wonder the need for higher levels of market automation has become a burning issue in the region.

There are some obvious opportunities where higher levels of automation can increase efficiency and reduce costs. One is client interfaces. Another is pre-matching engines. The third is the need for improvement to core settlement processes and fourth is corporate actions management. The need for improvements in these areas goes beyond immediate demands. Without substantial improvements to the standards infrastructure in Asia, local markets will be unable to support the substantial growth in transaction volumes.

Letter From Gerard Hartsink (continued from page 1)

Members of the RMG Meeting in Tokyo.

Education about the implementation of ISO 20022 reached a significant milestone with the publication of “ISO 20022 for Dummies”, a new addition to the popular Dummies series created with the assistance of Registration Authority SWIFT. The book has been introduced at this year’s SIBOS and is available to interested persons.

This RMG Newsletter issue also contains other useful articles of interest to ISO 20022 followers. There are several fine accounts of the activity going on in our SEGs that all members should carefully study.

I wish to thank all the experts who have provided input to the newsletter. It is now recognized as a very successful mode of keeping in touch. All worked hard to make sure we are all informed about trends and programs undertaken by RMG members that have application to the ISO 20022 standard. We are now looking for authors for the next issue of 20022 Newsletter for our summer edition.

Sincerely,

Gerard
Gerard Hartsink
ISO 20022 Newsletter  Winter 2010

volumes predicted to take place over the next five years. There is a technical evolution underway as a form of ISO 20022 message standards for securities & payments that will resolve most of the message communication challenges that we face today. Implementation of new ISO 20022 Universal Financial Industry Message Scheme messages infrastructure will transform the Asian landscape.

MORE ABOUT ISO 20022 MESSAGE STANDARDS
Since 2005, key industry players are working on new XML based ISO 20022 methodology for securities messages. Standards committees and working group comprised of industry experts are ensuring that the new message standards will cover end-to-end business process across all the markets.

- End to End Coverage of Business Process: ISO 20022 message standards takes into account end-to-end business process and also takes into account the information required by customer and end customers.
- Help in achieving STP: The new messages are developed in such way that the users are not required to use free format fields such as 70e in MT messages or free format messages, such as MT 568 or MT 599. The new standards supplement proprietary messages and fills gaps where manual processing, FAX & e-mails have had to suffice.
- Cost: New message standards are easy and cheap to implement

ADVANTAGES OF USING ISO 20022 OVER EXISTING ISO 15022
In Asia, we successfully migrated from ISO 7775 to ISO 15022. As a part of 15022 messages development, each piece of business information is defined in an unambiguous way and registered in a data field dictionary and these business elements are being used consistently across all the messages.

Migration from old to new standards is not easy; however, ISO 20022 migration is completely different. The main advantages in ISO 20022 over ISO 15022 are:
- ISO 20022 builds on the ISO 15022 registration infrastructure;
- ISO 20022 provides short term coexistence & long term convergence objectives ;
- ISO 15022 is ‘message centric’: the focus is on the development of a message format, while ISO 20022 considers the underlying business processes;
- ISO 20022 is designed to allow users to implement standards better, cheaper and faster, and
- The scope of ISO 15022 is limited to securities messages, while ISO 20022 covers all financial messages, thereby allowing securities players to use the same language for all their financial communications.

WHAT’S HAPPENING IN ASIA?
In Asia, most of the participants are using ISO 15022 messages although there are still a few industry players who are not using electronic messages and prefer to communicate using faxes & e-mails. Faxes & e-mails have an adverse impact on achieving STP (Straight Through Processing). Significant efforts are being made to bring all the participants on the same communication channel.

Standardized messaging co-operation is now gaining traction in a range of markets where the authorities and market participants have understood the benefits of adopting industry messaging standards. In Asia, three countries namely; Japan, Australia and Singapore are actively involved in ISO securities standardization initiatives. The responsibility lies with these three countries to involve other Asian countries and or experts from other countries in new message development initiatives.

Asian countries are under pressure to invest in core infrastructure and to revalidate and/or accelerate their adoption of best practices and technology standards from the developed markets. Standards harmonization is becoming increasingly necessary for markets to grow and to achieve financial stability in the APAC region. There is a strong case to set-up integration initiatives such as ASEAN Linkage initiative. Care has been taken so that the regional initiatives shall not be a stumbling block for the efforts of each individual market to develop themselves. The idea is that regional efforts should progress efficiently and in tandem with participating countries local initiatives.

MORE ABOUT ASEAN LINKAGE
ASEAN linkage initiative is about establishing electronic trading link between South East Asian exchanges. There are considerable challenges to be overcome such as complexities in individual market in terms of market practice and local laws. In the next few months we hope to have consensus on the listing rules, trading rules & taxation requirements. From the standards point of view, in my opinion, using ISO 20022 for pre-trade and post-trade messages will resolve most of the cross-countries implementation issues as the main feature of ISO 20022 are that it considers end-to-end process rather than message centric approach.

CONCLUSION
Harmonization initiatives are coming from U.S. and Europe into Asia. Industry initiatives and regulatory requirements such as Giovannini, MiFID and SEPA, require using single, widely acceptable protocol for communication to support their harmonization initiatives.

The adoption of a common messaging standard in Asia, supplemented by fully integrated end-to-end proprietary electronic platform cutting across securities services and cash, will improve the efficiency of the interaction between all the market players.

ISO 20022 should set the next achievable standard to ensure that investment into core infrastructure delivers a higher degree of end-to-end automation while providing a solid foundation to support Asian growth.
Earlier this year, the TSG was tasked with providing a detailed analysis on the migration of the changes proposed in the new edition (2011) of ISO 20022 compared to the current edition (2004). The analysis was to gauge the importance of the changes in terms of benefit, impacted artifacts (UML models, XML schemas, e-Dictionary, Repository Web Query Tool or other information published on the ISO 20022 website) and impacted users (submitting organisations, users/implementers of ISO 20022 messages and the RA). This article presents an overview of the findings contained in the published paper presented to TC68/RMG for review.

The approach taken was one of determining whether it is possible to implement the change progressively, that is carried out when there was a need for new message development and at the occasion of message maintenance or alternatively, or if a big bang approach is necessary.

The overall impression gleaned as a result of TSG’s analysis was that the migration to the new edition of ISO 20022 will have a similar impact to the migration to UML 2 that was undertaken by the RA in March 2009. Most of the changes will affect the models and the repository/dictionary, but the impact on the actual XML schemas and message instances will be limited which will be welcomed by submitters and users of the Standard.

**IMPACT ON USERS**

The users/implementers of the messages are impacted whenever a change has an impact on the XML instance of a message (that is, the message sent/received on the wire). Depending on the kind of artifacts used to build the applications that generate/process message instances, users can also be impacted by:

- changes that affect the XML schemas (for those who use the XML schema to issue or receive XML instances);
- changes at the level of the UML message models (for those using the UML models of the messages for their sending/receiving applications) or
- changes at the level of the Dictionary (for those that make use of the electronic copies of the Dictionary).

The TSG view is that current implementers usually use the XML schemas but do not use the UML models yet. Under this assumption, the impact on the users will be extremely limited and a progressive implementation of the few changes to XML schemas/instances will be possible at the occasion of the (business) maintenance of the existing messages.

**IMPACT ON SUBMITTING ORGANISATIONS**

Submitting organisations are impacted whenever a change impacts the modeling guidelines, the models or the repository/dictionary. As all these artifacts will be impacted by the new edition, submitting organisations will need to adapt whenever they need to maintain their existing messages or develop new ones. New outputs will need to be delivered such as the Business Transactions addressed by candidate messages.

As the majority of submitting organizations are using the SWS software provided by SWIFT to complement the Rational Software Modeler (RSM) modeling tool, the adaptation will mainly consist of getting used to a new version of the SWS Lite that SWIFT will need to build to comply with the new edition. Compared to the 2009 migration to UML 2, which had required migration from Rational Rose to RSM, the impact will be lower since RSM will continue to be used.

Any submitting organizations that use MagicDraw will need to implement most of the modeling guidelines themselves. All submitting organizations will also receive a new, migrated dictionary and models where applicable.

**IMPACT ON THE REGISTRATION AUTHORITY (RA) AND OTHER BODIES**

The RA will be impacted by all of the changes. They will require migration of the Repository, building of new software and conversion of the vast majority of the outputs available on the ISO 20022 website. Most of the changes will need to be implemented together in one go (big bang), although some important ones may be implemented in later phases, such as the transformation of message models in the ASN.1 syntax on top of the XML syntax.

The TSG will need to support the RA in the revision of the modeling rules. It will also need to complement some specifications of the new edition of ISO 20022 that were left too vague to ensure a consistent interpretation and implementation by the RA and the submitting organisations. For example the formalism to specify the Business Rules has not been defined yet.

Lastly the ISO 20022 RMG’s Standards Evaluation Groups (SEGs) will need to get accustomed to the slight changes that will impact the evaluation documentation (MDR, schemas, models, diagrams). They may need to get involved in the building of the formal Business Transactions covering existing messages that pertain to their business domain.
ASEAN+3 member countries (Association of Southeast Asian Nations plus The People’s Republic of China, Japan, and Republic of Korea) established a forum called ASEAN+3 Bond Market Forum (ABMF) in September 2010 to discuss standardization and harmonization of securities transactions in the region. The Forum is expected to function as a common platform to foster standardization of market practices and harmonization of regulations relating to cross-border bond transactions in the region. As a first step, the ABMF begins discussions with two sub-forums—one is focusing on regulations and the other is focusing on financial messaging. Particularly, ISO20022 is an important guiding framework for the discussion. In comparison to very close trade linkages, financial markets in the region are still fragmented. It is inevitable that each country may want to build their proprietary system based on their needs given the differences in languages and practices, however, we must establish common understanding about what needs to be harmonized, and what can be left to individual markets.

The ABMF will not only lead the region towards more harmonized and integrated markets, but also act as the nexus between ASEAN+3 and the rest of the world in international standard setting and rule making. The ABMF is a part of regional cooperation under the Asian Bond Markets Initiative (ABMI) to develop efficient and liquid bond markets in Asia.

REMARKABLE GROWTH OF LOCAL CURRENCY BONDS
Asian countries, particularly ASEAN+3 countries, have committed to developing local currency bond markets. It was a lesson from the Asian currency crisis in late 1990s that too much dependence on short-term foreign currency financing and dependence on banking sector were the major causes of the crisis. In 2003, ASEAN+3 Finance Ministers endorsed the ABMI to develop efficient and liquid bond markets in Asia, with an aim to create better utilization of abundant Asian savings into Asian investments.

Since that time, thanks to the various efforts made by the governments, local currency bonds in the region has more than tripled. Especially, in 2009, after the recent financial crisis, the outstanding local currency bonds in the region grew 16.5 percent from the previous year. This clearly shows that the local currency bond markets in the region can function as a spare tire for banking systems to provide another financial intermediary channels in the region. Now, the share of

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1. The views expressed in this paper are those of the author and do not necessarily reflect the views or policies of the Asian Development Bank.
emerging Asia’s local currency bonds in the world’s total surpasses those of UK, Germany and France. The emerging Asia is becoming an important asset class which cannot be ignored by global investors.

Moreover, better economic performance of Asian economies in comparison to the developed economies is attracting many more investors. Although we have witnessed repatriation after the Lehman shock, foreign holdings of local currency bonds in the region is expected to grow continuously.

Although the current market environment is very positive, the ASEAN+3 governments consider further efforts necessary. As yet, intra-regional portfolio investments are very limited and affluent savings are not fully utilized in the region. Cross-border transaction costs are high at an estimated three times more than in developed markets due to market barriers and lack of standardization. To improve the situation, ASEAN+3 will establish Credit Guarantee and Investment Facility (CGIF) as a trust fund of ADB with an initial capital of US$700 million to support the issuance of corporate bonds in our region, and thus contribute to the development of regional bond markets. In addition, a panel of experts from the private sector in ASEAN+3 markets has released its study and recommendations on regional cross-border bond settlement as part of efforts to expand Asia’s local currency bond markets. The panel called Group of Experts (GoE) consisting of leading public and private sector institutions, including national central securities depositories (CSD) from ASEAN+3, international central securities depositories (ICSD), global and regional custodians, and the Asian Development Bank (ADB), has examined cross-border transaction costs in the region; assessed business cases of possible regional settlement intermediary (RSI); and identified barriers to cross-border investment and settlement in each markets. Based on the recommendation of the GoE to establish a Coordinating Body to reduce the barriers, ABMF was proposed. And the establishment was endorsed by finance ministers of ASEAN+3 when they met in Tashkent, Uzbekistan in May 2010.

The ABMF is a very unique regional initiative. Unlike Europe, there is no super-national body in Asia which is comparable to European Commission to coordinate the member countries and enact rules and regulations. Unlike developed markets, the role of the private sector to set standards and common practices is limited and national market practice groups are not prevailing in Asia. The ABMF is expected to provide in-depth analysis of bond markets in the region and make intra-regional comparisons in order to identify national differences and target the market characteristics required for harmonization and standardization; (ii) explore issues to promote harmonization of bond standards to facilitate cross-border issuance and investment; (iii) prepare a strategy and road map for the harmonization of regulations and market practices; and integration of bond markets across the region.

The ABMF is a very unique regional initiative. Under the sphere of ASEAN+3, the ABMF was established in September 2010. The first meeting was held in Tokyo together with ASEAN+3 government and central bank officials.

The ABMF aims to: (i) assess the existing regulatory frameworks and identify recommendations on how to foster harmonization of regulations and market practices that facilitate cross-border bond transactions in the region; (ii) enhance dialogue between the private sector and ASEAN+3 officials to develop bond markets in the region and promote harmonization, standardization, and integration; and (iii) provide opportunities to exchange knowledge, expertise, and experience among the private and public sector in the region.

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bridge such gaps; the gap among the regulators in ASEAN+3 for more harmonized regulations; the gap among the private sector players in the region for more standardized market practices; and the gap between the private and public sectors for more integrated markets in the region.

As the ABMF was established under the ABMI, ASEAN+3 finance ministries and central banks will be closely involved in discussions. The ABMF shall provide ASEAN+3 officials with the viewpoints and recommendations of the regions’ bond market experts on issues that will be adopted by Task Force 3 (TF3) of the Asian Bond Markets Initiative (ABMI). In other words, TF3 will decide agenda items to be discussed under the ABMF. The ABMF will consult with the co-chairs of TF3 from time to time in undertaking any regional activities and will report to TF3 on a regular basis regarding the progress of its activities.

The ABMF participants are made up of financial experts from the ASEAN+3. The experts are nominated as national members by the governments and central banks. In addition, additional experts are invited as national experts and international experts based on consent by the national members. The members and experts will be selected from among those actively involved in bond markets in the region. The national members and the experts will be selected based on which issues are adopted by TF3, as they must have extensive knowledge of and expertise in the relevant issues.

**TWO SUB-FORUMS**

As a first step, the ABMF begins discussions with two sub-forums. One will collate and compare regulations and market practices in the region, while the second will look to harmonize transaction procedures and bond messaging formats with a view to cutting the cost of cross-border deals. This arrangement is based on the GoE report which recommends improving information flows to foreign investors to narrow the information gap by facilitating access to information on regulations, and to tackle major barriers from the settlement barriers among private sector experts in the region.

The Sub-Forum 1 focuses on regulatory aspect. First, the Sub-Forum will collect all relevant information on regulations as well as market structures and practices in the region. This work provides the foundation for the future discussions of harmonization and standardization. Once all of the relevant information has been collected, a compendium of regulations and...
market structures and practices in the region will be published through the ADB-sponsored Asian Bonds Online website.

The Sub-Forum 2 aims to enhance regional Straight-Through-Processing (STP) by harmonization of transaction procedures and standardization of messaging formats. To achieve the objective, Sub-Forum 2 will clarify all transaction procedures involved in cross-border transactions from one end-user to the other end-user.

Ideally, a cross-border transaction should be executed without any manual processes or transaction information conversion between domestic systems. This ideal situation can materialize only if all transactions are operated through systems using common standards and the same messaging. This is not currently possible in Asia because individual countries have their own system and standards. This is because certain transaction procedures must follow national requirements to account for unique circumstance; besides, some segments of a market may prefer their own ways of handling transactions. Furthermore, differences in languages remain the biggest barrier as some Asian countries use their own letters and characters for communication. If we want to integrate Asian retail markets it is inevitable that each country may want to build their proprietary system based on their needs given the differences in languages and practices, however, we must establish common understanding of what needs to be harmonized and standardized, and what can be left to individual markets.

Under the flexible framework of ISO 20022, the region may be able to develop regional standards which conform with international standards.

Efforts for harmonization and standardization of securities transactions in Asia have begun. The ABMF will not only lead the region towards greater harmonized and integrated markets, but also act as the nexus between AEAN+3 and the rest of the world in international standards setting and rule making. It is expected that international experts to the Sub-Forum will convey the region’s voice to the ISO 20022 discussions. Given large differences in development levels of the markets and economies in the region, the task is not easy. The works are inevitably gradual and step-by-step. However, this unique regional initiative will create a momentum to push the region more harmonized and integrated markets in the future.

LIST OF INSTITUTIONS PARTICIPATING TO ABMF AS OF 28 SEPTEMBER 2010

**SUB-FORUM 1**

Brunei International Financial Centre (BIFC)
National Bank of Cambodia
SEC of Cambodia
People’s Bank of China
China Security Regulatory Commission
Hong Kong Monetary Authority
China Securities Depository and Clearing Corporation Limited Shanghai
China Government Securities Depository Trust and Clearing Co., LTD
Ministry of Finance of Indonesia
Indonesian Capital Market and Financial Institutions Supervisory Agency
Tokyo Stock Exchange, Inc.
Japan Securities Dealers Association
Japanese Bankers Association
Nomura Securities Co. Ltd.
Daiva Securities Capital Markets Co. Ltd.
Korea Financial Investment Association
Korea Capital Market Institute(KCMI)
Korea Exchange(KRX)
Securities and Exchange Commission Office, Bank of the Lao PDR
Financial Market Association of Malaysia (PPKM)
Central Bank of Myanmar
Bureau of Treasury of the Philippines
Securities and Exchange Commission of the Philippines
Securities and Exchange Commission of Thailand
Thai Bond Market Association (Thai BMA)
Vietnam Bond Market Association (VBMA)
Asian Development Bank

**SUB-FORUM 2**

Brunei Currency and Monetary Board (BCMB)
SEC of Cambodia
People’s Bank of China
China Security Regulatory Commission
Hong Kong Monetary Authority
China Securities Depository and Clearing Corporation Limited Shanghai
China Government Securities Depository Trust and Clearing Co., LTD
Ministry of Finance of Indonesia
Indonesian Capital Market and Financial Institutions Supervisory Agency
PT Kustodian Sentral Efek Indonesia (KSEI) Indonesian Central Securities Depository
Japan Securities Depository Center, Inc.
Mizuha Corporate Bank, Ltd.
Korea Securities Depository(KSD)
Korea Capital Market Institute(KCMI)
Securities and Exchange Commission Office, Bank of the Lao PDR
Central Bank of Myanmar
Philippine Dealing System Holdings Corp/PDS Group
Bankers Association of the Philippines (BAP)
The Stock Exchange of Thailand (SET)
Vietnam Securities Depository
The Bank of Tokyo Mitsubishi UFJ Ltd
State Street Global Advisors
Citibank
JP Morgan
Deutsche Bank AG
SWIFT
HSBC
Tata Consultancy Services
Asian Development Bank
A Tale of Two Standards: XBRL and ISO 20022
By Mark Bolgiano, XBRL

THERE ARE STANDARDS... AND THEN THERE ARE STANDARDS.

In the business community at large, “Standards” is a term that can often launch a confounding conversation about two things at once.

To some, “standard” means a technical specification like XML, HTTP, or SMTP that conveys content – standardizing the “how”. To others, it means an industry agreement like ISO 20022 or GAAP – that standardizes elements of the content itself, or the “what”.

As the financial services industry collaborates to define and standardize content as data elements in ISO 20022, and the well-formed messages that put this data into motion, the world’s securities systems approach a new generation of interoperability.

Meanwhile, another standard, the eXtensible Business Reporting Language (XBRL) specification, offers a powerful complement to ISO 20022 as a means of structuring financial data in the “first mile” – the originating documents issued by financial institutions.

In combination, XBRL and ISO 20022 may prove to be a quiet revolution in the straight-through processing (STP) goals the industry has been seeking for years, in search of faster, cheaper, higher-quality data, and the higher confidence, lower risk operating environment that results.

XBRL – BRIDGING DOCUMENTS AND DATA

The global adoption of the XBRL standard, an XML derivative designed for issuer tagging of business reporting documents, has gained global momentum as stock markets and regulators mandate its use for tagging in financial statements with elements from digital dictionaries, often referred to as taxonomies.

Unlike most XML specifications, XBRL standardizes documents and reports, not transactions. It is optimized to bring consistency to complex documents that may be relatively indeterminate – with contents ranging from narrative text, to dimensional data (tables that can be “pivoted” and clustered by different year, geography, etc) as well as discrete numbers and facts.

To meet the unique functional requirements as a business reporting standard, the metadata found in XBRL tags are particularly rich. Taxonomies provide the expected tag attributes – values, applicable date ranges, field labels, and synonyms, format and units of currency and measurement – but they also preserve calculation relationships between elements, presentation metadata to render the XML back into proper human-readable documents, a business rules layer for validation, even links to alternative languages to facilitate instant translation.

The inherent extensibility of XBRL accommodates the flexibility needed for corporate reporting, balancing the need for a common core set of elements and disciplined extensions to allow companies to tell their story to investors and still provide those investors with true comparability to other companies.

PROOF OF CONCEPT – THE XBRL ISO 20022 CORPORATE ACTIONS PILOT.

Recently, ISO 20022 served as the basis for a new XBRL taxonomy for issuers to use in tagging corporate actions – announcements and events such as tender offers, mergers, and dividend payments.

The Issuer-to-Investor (“I2I”) Initiative, a cooperative research project of XBRL US Labs, the Depository Trust and Clearing Corporation, and SWIFT has successfully developed an XBRL taxonomy that models ISO 20022 corporate action elements. In May, a business case was publicly released containing a more detailed rationale for the convergence of XBRL and ISO 20022.

The ISO 20022 Corporate Actions taxonomy was released in September 30 for public review and comment, and in advance of a wider voluntary issuer program, financial insti-
tutions such as Citibank have already announced participation in a pilot to test the taxonomy and measure benefits along the entire information supply chain, tagging to consumption of XBRL-tagged corporate actions documents. In addition to bringing the ISO 20022 standard all the way upstream to the issuer, the taxonomy contains metadata that enables an XBRL-tagged corporate actions document to produce a non-XBRL ISO 20022 message ready to be transmitted over networks such as SWIFT—a potentially revolutionary software-independent convergence of document origination and data transport.

WHY YOU SHOULD CARE.

XBRL and ISO 20022, in combination, may well prove to be strong mutual drivers for the adoption of both standards. Both are open standards that rely on the strength of industry collaboration and disciplined standards governance processes.

Corporations around the world are already using XBRL to tag compliance documents; there is no competing standard in the document-tagging space. The extension into financial services business line documents presents a minimal adoption barrier for ISO 20022 to originate with the issuer.

The I2I initiative to marry XBRL and ISO 20022 in the corporate actions space may prove more than the concept of doing what we do today more efficiently. It may, in fact, provide a fertile environment for innovation. Citibank has already seized on the possibilities for processing American Depositary Receipts (ADR) and a recent international conference for U.S. Investment Withholding Tax in London concluded that XBRL and ISO 20022 may present a solution for dealing with the new IRS Foreign Account Tax Compliance Act (“FATCA”) regulations for taxing returns on foreign-held securities.

XBRL is dependent on authoritative sources of content; for example, the XBRL taxonomy mandated by the US Securities and Exchange Commission (SEC) for public company financial statements uses Generally Accepted Accounting Principles (GAAP), the American accounting standard maintained by the Federal Accounting Standards Board (FASB). Other accounting standards, including international IFRS accounting guidelines, have also been modeled in XBRL for public and regulatory use.

Voting is currently underway at ISO TC68 on the DIS (Draft International Standard) stage of the new version of ISO20022. This is an important stage as it marks the transition into what the ISO community considers to be a technically stable document. After the DIS stage comes FDIS (Final Draft International Standard) which is a 2 month ballot involving the wider ISO community beyond TC68. At this FDIS stage the ability to comment is much reduced and effectively the ISO community is being asked to approve publication as a new IS (International Standard). The DIS ballot will conclude January 30, 2011.

Assuming ISO TC68 does not receive any substantive technical comments from this ballot, the TC68/WG4 might expect the FDIS approval ballot to conclude early Q2 2011. A NWIP (New Work Item Proposal) for the revision of ISO 20022 Part 6 (transport characteristics) has been issued to TC68 with ballot closure December 3, 2010. If approved by TC68 the NWIP will immediately go out for DIS ballot. One should recall that the RMG recently agreed to implement ISO 20022-6 (transport characteristics) against the current version of ISO 20022 and so this NWIP is to upgrade that existing part 6 to bring it in line with the new version of ISO 20022. Fundamentally the technical content of this part is not changing, and these steps are being taken to ensure that the new version of ISO 20022 can be published next year as a complete and cohesive set of standards, including part 6 on transport characteristics.
In June 2010, the ISO 20022 Registration Management Group (RMG) approved a mechanism to “extend” ISO 20022 messages with supplementary data: what is a “message extension”, what is it used for, when is it allowed in ISO 20022 messages, what is the risk, what is at stake?

A message extension is a built-in mechanism which allows, when necessary, supplementary data to be provided in a message without having to update the approved message format. Hence, users that do not need the supplementary data will not be impacted.

The extension mechanism is usually made of a ‘container’ that can transport additional data and may include a pointer that indicates which information is being ‘supplemented’. While there are several different container formats, by far the most popular is a large ‘free text’ field. In the SWIFT MTs, the well known ‘field 72’ plays that role. When there is a need to communicate specific information that is not catered for in the other fields of a message, the sender(s) and receiver(s) will agree on how to communicate this information in field 72. The other users will never receive this information and are thus not impacted.

The extension mechanism that the RMG approved for ISO 20022 messages, is a container that, when used, includes supplementary data which is structured as an ISO 20022 compliant schema, looks like the rest of the message and can be processed in the same way. It is a much better mechanism than a free text container.

The purpose of this article is to describe why SWIFT is a firm believer of the advantages of supplementary data extensions when their use is carefully managed.

The very nature of the extension requires that it should remain exceptional - if it is necessary to communicate supplementary data, the message should be upgraded and include a dedicated component to transport and process that information. Although… in some cases, the information is so specific and used by so small a community of users or necessary for so short a period of time that it would make more sense to keep it in an extension container than to change the message format.

The above describes the two cases where using an extension mechanism is to be considered:

1. When there is an urgent need to transport supplementary data and it is impossible to wait for the message to be upgraded with a new dedicated component. Use of the extension will then be temporary and will cease when the upgraded message becomes available

2. When the supplementary data is too specific or volatile to be considered for a dedicated component. Use of the extension will then be permanent; the message will not be further upgraded to cater for the supplementary data.

For each of the two use cases above, there are pros and cons to be balanced when considering the extension option.

**USE CASE 1 - BRIDGING THE GAP WITH THE NEXT MESSAGE MAINTENANCE**

Is it really effective for the group of concerned users to implement a temporary extension solution and have to migrate to the new, definitive solution when the message is upgraded?

The answer depends, on one hand, on the maintenance turnaround and, on the other hand, on the extra effort required to implement the temporary extension solution and then migrate to the definitive solution.

The ISO 20022 maintenance process includes a ‘fast-track’ cycle which can deliver a new version of a message in a pretty short timeframe. It was invoked last year: a change request introduced on 21 December 2009 resulted in a new version of the related messages published by mid March 2010. That's a maintenance turnaround of less than a quarter!

If it is not quick enough though, using the extension mechanism is the solution, and the extra effort to migrate from the extension solution to the definitive solution is minimized by using an XML extension container where the supplementary data could already be structured in the way it would appear when the message is upgraded.

Is it really effective for the other users (not concerned by the supplementary data) to have to migrate to a new version?

Each time a change is made to an ISO 20022 message, the message name changes to indicate the new version number. To remain on the same page and avoid a potential Tower of Babel where many versions are used concurrently, it is recommended that the whole community of users always migrates to the latest version including the users not concerned by the changes. Of course, this migration requires a
minimal effort for users not concerned by the changes, but if new, unscheduled versions are created every quarter, it may become a burden and impact the confidence of the users and, hence, the adoption rate. Indeed, if a message is updated continuously, potential users will wait until it is stabilized to invest in its implementation.

Here again the extension mechanism offers a way to address specific needs as they arise and wait for the next yearly maintenance cycle to include them all in a single new version of the message.

USE CASE 2 – TOO SPECIFIC INFORMATION

Why hide specific information in an extension?

At message design time, the business requirements of the various communities of users are collected and form the basis for development of the candidate message. Agreeing the message contents based on collected business requirements is usually a challenge. The specifics of each community are scrutinized by the representatives of the other communities who, in general, would prefer not to ‘pollute’ the message with information that is not relevant to them.

The typical compromise is to include all specific information in optional components, even if this information is actually mandatory when used in the context of the related community. The resulting message may be difficult to implement because it does not show clearly when to use the optional components. Additional Message Implementation Guidelines (MIG) must be documented by each community and the implementation of these guidelines usually requires additional programming.

To address this issue, the RMG set up a process to invite communities of users to publish, on the ISO 20022 website, their specific way of implementing each ISO 20022 message. Each community can indeed use a Master Message Template spreadsheet provided by the Registration Authority (RA) on the ISO 20022 website to define its ‘sub message’ or ‘variant’. A variant is completely aligned with the master message but hides all the optional components that are not relevant for the community. The variant eases implementation since it shows how to ‘restrict’ the master message and use the relevant optional components of the master message for the specific community.

Provided each remains compliant with the master message, communities can change their restrictions and define new variants without impacting other communities of users. In contrast, a community that needs supplementary data in a variant would have first to request the addition of this supplementary data to the master message, which would impact all communities of users.

The supplementary data extension mechanism offers another interesting way of creating ‘sub messages’. The master message includes the globally agreed data only, while the supplementary data specific to a community of users is defined in the extension container. The ISO 20022 website is used to publish the master message (global data + the exten-
sion container) and the series of approved supplementary data extension schemas, which will show how to implement any additional mandatory or optional data required for each specific community.

The advantages are threefold:
- there is a clear, fixed global standard to be used by everyone. And users can select the supplementary data extensions they need to implement - and disregard the others - depending on the communities in which they are active
- the supplementary data extension schema can be implemented as easily as the master message schema
- unlike variants, any kind of changes or additions can be made to the specifics of a community without impacting the master message or the other supplementary data extensions, hence without impacting the other communities of users.

Are there any concerns about this approach?
Yes, there are. There is a danger that the message extension mechanism be used to ‘escape’ the control of ISO 20022. Communities of users could define, on their own, new or updated supplementary data extension schemas to be used in the current ISO 20022 messages. This would result in a proliferation of ‘sub messages’ all compliant with the master message, but without guarantee of compliance of the supplementary data extension schemas.

The concept of ‘extensions’

The content of supplementary data extensions must be managed centrally and globally to ensure their ISO 20022 compliance and avoid that the same specific requirements be addressed differently by two communities in their respective extensions. The RMG has mandated the Standards Evaluation Groups (SEGs) with this management. They are the right bodies both to ensure that similar specific requirements result in the same message construct, and to decide whether a requirement is specific enough to be kept in the extension. Each SEG will need to find the right balance between incorporating a specific need in the global message and letting users define the variant implementation, or ‘hiding’ too specific information in an extension to protect the user base. Only the compliant supplementary data extensions approved by the SEGs will be published on the ISO 20022 website.

Extensions are one more tool that the ISO 20022 community can use to facilitate the maintenance of messages at the pace required by the business, and take local requirements into account while minimising implementation burden.

How to manage extensions?
The prerequisite to benefit from this additional tool though, is that all ISO 20022 messages that are deemed to be subject to frequent evolution or a high rate of local market practice be equipped with the approved supplementary data extension mechanism. Within the 2010/2011 yearly maintenance cycle, SWIFT will incorporate the supplementary data extension mechanism to a first set of 42 securities messages.
Although the mandate, scope and responsibilities of the RMG are established by the ISO20022 standard, it only establishes the high-level framework. In the day to day operation of the RMG it is necessary to have internal rules which govern not only the operation of the RMG but also that of the groups that report to it. At the present time the RMG oversees four Standards Evaluation Groups (SEGs), the Technical Support Group (TSG), the Registration Authority (RA), the Cross SEG Harmonisation Group (CSH) and a number of sub-groups focused on specific tasks, of which the Rules sub-group is one. With a broad range of diverse issues flowing to the RMG from a plethora of sub-groups internal governance plays an important role in supporting the efficient operation of the group understanding, managing and resolving issues. Within the RMG committee the Rules sub-group takes care of drafting the rules and oversees the detailed work on any items of business that effect governance. The rest of this article provides an update on the latest developments within the Rules sub-group program of assigned work.

**SEG ELECTIONS**
To consider whether further guidance is necessary on the process by which Standard Evaluation Group (SEG) convenors, co-convenors and their secretaries are elected. The governance text needs to respect the fact that the SEGs unlike the RMG is not constituted as a voting body and therefore empowered to run elections.

**SEG MEMBERSHIP**
To provide further guidance on the criteria for the membership of the SEGs and make recommendations on membership appointment and management of the SEGs.

**EVALUATION PROCESS OF THE BJ**
The BJ Evaluation (within the context of the SEGs) is a critically important part of the ISO 20022 process and a more detailed understanding of what it means to perform an Evaluation is necessary to help guide the SEGs as they manage their business and to allow external stakeholders to better understand and prepare for the evaluation process.

**ISSUE RESOLUTION PROCESS**
Develop a process to help guide the RMG membership to deal efficiently with any issues that may arise in connection with either formal decisions of the group or the interests of particular stakeholders involved in the RMG decision making process.

**PARTICIPATION**
Participation in meetings and formal voting by RMG members is of great importance as it helps to determine the effectiveness of this large multi-stakeholder group in reaching broad consensus on behalf of the global industry. Attendance and active participation at meetings is important to facilitate dialogue, reporting and decision making. Where formal electronic voting on balloted items is concerned, it is vital that voting delegations take the time necessary to vote their position. In fact it is considered to be of prime importance to encourage good voting records across all RMG members.

**CLARIFYING THE SCOPE OF NEW BUSINESS JUSTIFICATIONS (BJ)**
It is important that the RMG committee can as far as possible ensure that there is as much clarity as possible within each submitted BJ in order to minimize the threat of divergences from or duplications of, existing business processes already part of the ISO20022 Business Process Catalogue.

**WITHIN THE RMG COMMITTEE**
**THE RULES SUB-GROUP**
**TAKES CARE OF DRAFTING THE RULES AND OVERSEES THE DETAILED WORK ON ANY ITEMS OF BUSINESS THAT EFFECT GOVERNANCE.**

**Internal Governance of the ISO 20022 Registration Management Group (RMG)**

By James Whittle, Convenor RMG Rules Sub-Group
A new book explaining the uses of and implementation plans for ISO 20022 launched under the popular ‘Dummies series’ is available to interested persons. The book, ‘ISO 20022 For Dummies’ is a creation by the SWIFT Standards group together with ISO and the publishers John Wiley & Sons.

The book demystifies ISO 20022’s purpose and potential and aims to create awareness of ISO 20022 through a clear understanding of its benefits. It follows the well-known ‘For Dummies’ formula of informal, easy-to-use knowledge reference books. It covers the origin of the standard, the workings of the ISO organization that promotes and maintains it, and the unique role ISO 20022 can play in enabling business process automation across the financial industry.

“Writing the book was a true team effort involving SWIFT staff and many other contributors - a great example of industry collaboration,” explains Gottfried Leibbrandt, SWIFT’s Head of Marketing. This material was expanded by numerous experts from the financial services industry resulting in a draft that was distributed within SWIFT and to several prominent experts in the wider ISO community for comments and suggestions, many of which were incorporated into the final text.

Some in the ISO organization put their stamp of approval on the document by contributing to it themselves: Karla McKenna, chair of ISO Technical Committee 68 / Financial Services submitted a foreword, and the ISO secretariat provided useful background information on the organization’s structure and mission.

Even before its launch, this book captured the interest of many in the standards community. Jamie Shay, Head of Standards, SWIFT, comments, “At SWIFT, we believe that ISO 20022 is the right way forward for standardization in the financial industry. But we need to expand our sharing of that vision, because the full benefits of the standard cannot be realized until the industry is on board. ISO 20022 For Dummies will help to build that engagement by providing key information in a form that’s clear, concise, and accessible to non-technical readers. The feedback we have received from across the standards community for this initiative has been universally positive and encouraging”. ●
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epa (Single Euro Payments Area) stands for a European Union (EU) integration initiative in the area of payments. Following the introduction of euro notes and coins in 2002, the political drivers of the SEPA initiative – EU governments, the European Commission (EC) and the European Central Bank (ECB) – focused on harmonising the euro payments market. Integrating the multitude of national payment schemes existing today is a natural step towards strengthening the euro currency, accomplish the integration of the EU internal market and increase competition in the supply of payment services.

The original SEPA concept envisioned by the European public authorities holds that within SEPA, all euro payments will be domestic. Once SEPA is achieved, there should be no differentiation between national and cross-border euro payments. As such, the SEPA Credit Transfer Scheme (SCT) and the SEPA Direct Debit Schemes (SDD) developed – at the request of regulators – by the European Payments Council (EPC) are designed to eventually replace national euro credit transfer and euro direct debit schemes existing today. SEPA is currently defined as consisting of the EU 27 Member States plus Iceland, Norway, Liechtenstein, Switzerland and Monaco. Of the 32 SEPA countries, 16 are euro countries.

THE LEGAL AND REGULATORY ENVIRONMENT
Establishing the appropriate legal and regulatory framework is an important prerequisite to making SEPA a reality. The Payment Services Directive (PSD) adopted by the Council and the European Parliament aims at establishing a modern and comprehensive set of rules applicable to all electronic payment services in the European Union. The scope of the PSD is not limited to SEPA euro transactions but is relevant for all payments in all EU currency countries within the EU 27. The PSD is of particular relevance with respect to the roll-out of SEPA Direct Debit services because the PSD introduces common rules for the authorization and the revocation of direct debits. Therefore, the SEPA Direct Debit Schemes went live in November 2009, the deadline for all EU Member States to have adopted the Payment Services Directive into national law.

In October 2009, Regulation (EC) No 924/2009 of the European Parliament and of the Council took effect. Article 8 of this regulation establishes mandatory reach-ability for cross-border euro direct debits in the euro area as of November 2010. As a result, all payment service providers in the euro area offering euro direct debit services today will be reachable for SEPA Core Direct Debit.

SETTING AN END DATE FOR MIGRATION TO SEPA
The majority of market participants recognize that the successful completion of SEPA requires setting an end date for migration to the SCT and SDD Schemes. The European Parliament called on the Commission to set a clear, appropriate and binding end-date, which should be no later than 31 December 2012. In December 2009, the EU Finance Ministers represented in the Economic and Financial Affairs Council (ECOFIN) considered that establishing definitive end-dates for SDD and SCT migration would ensure that the substantial benefits of SEPA are rapidly achieved and that the high costs of running both legacy and SEPA products in parallel can be eliminated. Also the ECB has frequently pointed out the need to establish definitive deadlines for migration to a single set of SEPA payment instruments. The European Commission indicated that it plans to introduce a formal proposal for a Regulation intended to expedite SEPA migration in the fall of 2010.

EUROPEAN BANKING INDUSTRY SEES SEPA SCHEMES BASED ON ISO STANDARDS
The European banking industry represented by the EPC has developed the necessary harmonized payment schemes (business rules and standards):
• In November 2009, the EPC successfully launched the
SEPA Core Direct Debit Scheme and the SEPA Business to Business Direct Debit Scheme (SDD B2B). As of this date, banks throughout SEPA have gradually started to deliver SEPA Direct Debit services to their customers. Already today, 3,236 banks representing more than 70 percent of SEPA payments volumes signed up to the new schemes; of those, 2,817 banks offer both SDD Core and SDD B2B services.

- As of September 2010, some 4,471 banks representing more than 95 percent of SEPA payments volumes offered SEPA Credit Transfer (SCT) services. The SEPA Credit Transfer Scheme went live in January 2008.

The SEPA Schemes as set out in the SCT and SDD Rulebooks and adjacent Implementation Guidelines are available for download on the EPC web site, www.european-paymentscouncil.eu. The SEPA schemes rely on global ISO standards, in particular, IBAN (ISO 13616), BIC (ISO 9362) and ISO 20022 payment messages. The Implementation Guidelines are MIG’s (message implementation guidelines) according to the ISO 20022 vocabulary. They include mandatory ISO 20022 messages for the bank-to-bank space and recommended ISO 20022 messages for the customer-to-bank space. The EPC also published recommendations on how to map SEPA Credit Transfer and SEPA Direct Debit Rulebook requirements to payments reporting from banks and customers. These recommendations complement the EPC recommendations on the initiation of SEPA payments and the Rulebooks which define the mandatory rules for the processing of SEPA transactions between banks. As a result, the data required by the schemes can now be moved end-to-end from customer to bank, from bank-to-bank and from bank to customer in a manner compliant with the ISO 20022 initiation, bank-to-bank and cash management messages.

According to the SEPA indicators compiled by the European Central Bank (ECB), the share of SEPA Credit Transfers as a percentage of the total volume of credit transfers generated by bank customers amounts to 9.3 percent as of September 2010, and the share of SEPA Direct Debit amounts to 0.05 percent as of the same date. Migration to the SEPA schemes at the level of EU Member States is coordinated by national SEPA committees of the 16 euro area countries. All the migration plans are published in English on www.sepa.eu.

EVOLUTION OF SEPA SCHEMES AND RULEBOOK RELEASE MANAGEMENT

The SEPA schemes evolve based on a transparent and inclusive change management process defined in the SEPA Scheme Management Internal Rules which stipulate that all stakeholders may formally introduce suggestions for changes to the schemes. The EPC is required to evaluate the feasibility of such suggestions based on a fixed catalogue of objective criteria also set out in the internal rules. Any proposed changes to the schemes are subject to a three-month public consultation. Proposed changes to the schemes that find broad acceptance in the entire user community are taken forward. Change requests that lack such broad support are not – regardless whether such a change is proposed by a payment service provider or a customer representative. As a result of this change management process, the SEPA schemes now incorporate numerous features introduced by end users. The EPC also supports a proposal developed by the European Association of Corporate Treasurers (EACT), which allows companies to agree on a structure for remittance information to be transported with a SEPA Credit Transfer. In the SCT Scheme, 140 characters of remittance information are delivered without alteration or omission from the payer to the payee. These 140 characters can be unstructured (free text) or structured, as agreed between business partners.

In accordance with best industry practice, publication of updated SCT and SDD rulebook versions takes place once
annually (third week of November) followed by a one-year lead-time prior to such updates taking effect thus giving banks and their service providers sufficient time to implement changes to the schemes. For example: the SEPA Credit Transfer Scheme Rulebook version 5.0; the SEPA Core Direct Debit Scheme Rulebook version 5.0; and the SEPA Business to Business Direct Debit Scheme Rulebook version 3.0 will be published in November 2010. The SEPA Scheme Rulebooks released in November 2010 will take effect in November 2011.

THE SEPA SCHEMES TO MEET SPECIFIC CUSTOMER REQUIREMENTS

The process of defining SEPA schemes catering to corporate enterprises, small and medium-sized businesses (SME), public administrations and consumers across 32 countries can be compared to designing a new automobile: the basic model must meet key market requirements. At the same time, the auto must be flexible enough to include optional extras on demand. This concept provides maximum choice to customers while avoiding that a majority of customers has to buy features they do not need.

The SEPA schemes developed by the EPC allow for the harmonization of the euro payments market as requested by the regulators while providing the necessary flexibility; i.e. optional features, enabling payment service providers to develop SEPA products and services catering to specific customer needs. In addition, individual payment service providers may offer value-added services and / or a community of payment service providers may create features based on an Additional Optional Service (AOS). An AOS must meet the following three principles:

• All AOS must not compromise interoperability of the scheme nor create barriers to competition.
• AOS are part of the market space and should be established and evolve based on market needs. Based on these market needs, the EPC may incorporate commonly used AOS features into the scheme through the change management process.
• There should be transparency in relation to community AOS. In particular, details of community AOS relating to the use of data elements present in the ISO 20022 standards (including any community usage rules for the SEPA core mandatory subset) should be disclosed on a publicly available website (in both local language(s) and in English).

The general principle governing the SEPA process; i.e. to find the appropriate balance between harmonization and flexibility must of course also be kept in mind regarding the development of AOS which should not result in renewed fragmentation.

ABOUT EUROPEAN PAYMENTS COUNCIL

The European Payments Council (EPC) is the coordination and decision-making body of the European banking industry in relation to payments. The purpose of the EPC is to support and promote the Single Euro Payments Area (SEPA).

SEPA is an EU integration initiative in the area of payments designed to achieve the completion of the EU internal market and monetary union. SEPA is the area where citizens, companies and other economic actors can make and receive payments in euro, throughout Europe, whether within or across national boundaries under the same basic conditions, rights and obligations, regardless of their location. SEPA is currently defined as consisting of the EU 27 Member States plus Iceland, Norway, Liechtenstein, Switzerland and Monaco.

The EPC develops the payment schemes and frameworks necessary to realise SEPA. In particular, the EPC defines common positions for the cooperative space of payment services, provides strategic guidance for standardisation, formulates rules, practices and standards and supports and monitors implementation of decisions taken. The EPC consists of 74 members representing banks, banking communities and payment institutions. More than 300 professionals from 32 countries are directly engaged in the work programme of the EPC, representing all sizes and sectors of the banking industry within Europe.

For further information on the EPC please contact secretariat@europeanpaymentscouncil.eu or visit www.europeanpaymentscouncil.eu.
The International Payments Framework Association is Formed

By Arthur Cousins

Twenty-one banks, clearing houses (CSM’S) and associated payment service providers recently met in London to establish the International Payments Framework Association (IPFA).

The purpose of the group is to enable the exchange of multi-currency non-urgent payments between member organizations; whether through a CSM or directly or through member banks, utilizing the same standardized process and operating procedures. This should allow member organizations to offer their clients payments to new countries and/or currencies in a quick and efficient manner, thereby lowering processing costs and eliminating the complexities in international non-urgent payments.

CORE COMPONENTS OF THE FRAMEWORK

The immediate goal of the IPFA was the creation of the core components of the framework for processing of non-urgent cross-border credit transfers based on the ISO 20022 standard by 31 December 2009.

The components are comprised of:

• Operating rules and procedures;
• Contractual framework that binds the IPFA Members and Affiliates, and
• Message implementation guides

CONCEPT

The International Payments Framework (IPF) concept established a membership-driven organization that provides business rules, standards and operating procedures to improve cross-border credit transfers based on the ISO 20022 standard through a contractual framework binding the members to the business rules, standards and operating procedures and binding the affiliates to encourage their members or customers to use and implement these business rules, standards and operating procedures. The IPF business rules, standards and operating procedures will enable interoperability between existing domestic or regional payment systems and the ability to exchange transactions in multiple currencies while settlement will leverage existing processes.

The IPF therefore, provides an overlay structure that provides interoperability and reduces complexity between Clearing and Settlement Mechanisms (CSM’S) and banks with the bank members providing transaction volume.

The concept provides for exchanges between CSM’S as well as for exchanges between banks and between banks and CSM’S.

GUIDING PRINCIPLES

The guiding principle was to create a framework that will be cost effective, with low barriers to entry and usage, which
provides for a wide set of currencies/countries over time, which is compliant with country specific mandates/requirements and which ensures a global all-encompassing approach to establishing and maintaining the framework. Other principles that were embraced include:

- Adoption of a global view to ensure the most widespread acceptance and use.
- Embracing existing global standards whenever and wherever possible to insure ease of use and the removal of barriers to entry.
- Leveraging domestic payment channels and existing settlement practices to provide simplification of bank office processing, certainty of service and expanded global payment services.
- Evaluation of regulatory compliance needs to identify constraints and regulatory barriers that may require relevant legislation and regulations that apply to payment transactions and their relevance in the context of the IPFA and its members.

IMPLEMENTATION PHASES

Trans-Atlantic Transfers to go Live
The year 2010 will see the commencement of live traffic between two IPFA Members. The Federal Reserve Bank Atlanta USA (FED) and Equens in Europe will exchange both USD and EUR payments between the USA and Europe. Thereafter these members will consider transfers in GBP.

Next Phase
Several IPFA members have commenced planning for the inclusion of the currencies of the following countries; Brazil, Canada, Mexico and South Africa during 2010/2011.

LONGER TERM GOAL OF THE IPFA
The IPFA has a twin, longer term goal of increasing its membership and ensuring its members are able to transact in all FATF compliant currencies.
A number of ISO standards require, with a view to their updating or implementation, a competent body which has the requisite infrastructure for ensuring the effective use of international standards. These bodies are designated by ISO to serve as ‘maintenance agencies’ or ‘registration authorities’ under contractual agreement. Today, about 80 ISO standards require such bodies.

When selecting Registration Authorities, ISO is looking for “international organizations which have the capacity to implement and manage the implementation of an ISO standard on a worldwide basis”.

The functions of a Registration Authority (RA) are specified in the standard itself. In general, they consist in the allocation and registration of identification codes or numbers and in most cases, the Registration Authority will “implement and manage” the standard on its own.

Two examples:
• As the Registration Authority for ISO 9362 – Business Identifier Code, the role of SWIFT is to allocate BICs to institutions and publish them in a BIC Directory. ISO 9362 is a six-page document that describes both the structure of the BIC and the RA function.
• ISO 13616 - International Bank Account Number (IBAN) is 14 pages. It includes the structure of IBAN format and describes SWIFT’s role as RA as receiving candidate IBAN formats from National Standards Bodies, check them for compliance and publish them in an IBAN Registry on a website.

The basic function of the ISO 20022 RA is very similar to the IBAN RA function: receiving registration requests, check them for compliance, generate the corresponding outputs and publish them in a Financial Repository available on a website.

There are, however, two big differences between ISO 20022 and the above mentioned ISO standards.
• The ISO 20022 RA function is more complex. ISO 20022 includes 173 pages of technical specifications which explain how to develop ISO 20022 compliant models, how to produce compliant XML message schemas, how to register them in a Financial Repository, and what should be published on the ISO 20022 website. Providing the RA services requires the implementation of almost all these specifications.
• The ISO 20022 registration process is more complex. On top of a Registration Authority, ISO 20022 defines several additional bodies involved in the registration process: the Registration Management Group (RMG), the Standards Evaluation Groups (SEG) and the Technical Support Groups (TSG). Only a minority of ISO standards requires such additional registration bodies. These bodies have been specifically created for ISO 20022; and their existence and role is specified in the standard itself.

In practice, the ISO 20022 RA function is performed by a whole team of qualified business and technical experts from the SWIFT Standards Department, supported by SWIFT IT staff, who dedicate about 600 staff days per year to this function.

FIRST PHASE: REGISTRATION REQUESTS APPROVAL
Requests to develop new ISO 20022 messages and to update existing ones are received by the RA and approved by the RMG and the SEG in charge of the related business domain.

The role of the RA is to ensure that the description of the request is clear from a business perspective and includes all required information to allow the RMG and SEGs to take an informed decision.

To achieve this, the registration requests are first checked against the official ‘template’ that describes the various pieces of information required. They are then reviewed by SWIFT Standards business analysts in the field to ensure that the description is meaningful and complete from a business perspective. If it is not, the RA will return the registration
request to the submitter indicating what needs to be updated. Once a valid registration request has been received, the RA will publish it on the ISO 20022 website and initiate the approval process. During the approval process, the RA will act as the dispatcher and time keeper.

All Business Justifications and Change Requests are posted on the ISO 20022 website (see Status of Submissions and Catalogue of Change Requests) with their current status and history log.

In September 2010, the RA had processed 48 Business Justifications for new development submitted by 22 organisations.

SECOND PHASE: TECHNICAL APPROVAL OF CANDIDATE ISO 20022 MESSAGES

Once the development of a new message or a new version of an existing message has been approved, the RA provides required materials to the developing organization. This includes electronic copies of the ISO 20022 Dictionary and message models and the latest version of the ISO 20022 modelling guidelines.

Once developed, the candidate ISO 20022 message models are submitted to the RA for Quality Review. This review consists in verifying that the developer complied with the ISO 20022 development specifications, a task that requires in depth expertise in the ISO 20022 development methodology. A pool of senior SWIFT Standards developers is dedicated to this function.

SWIFT also provides ISO 20022 developers with a software – SWS Lite – that helps them developing message models and check their compliance before submission to the RA.

In general, candidate models need to be reworked by the developers and resubmitted to the RA. On average, three iterations are necessary to get compliant models, hence requiring the RA to perform three Quality Reviews of the same message models.

THIRD PHASE: BUSINESS APPROVAL OF CANDIDATE ISO 20022 MESSAGES

Once the candidate message models are compliant, the RA generates the corresponding XML schemas. It also produces a Message Definition Report with a full description of the messages. For this generation, the RA uses a software designed by SWIFT in compliance with the ISO 20022 UML to XML design rules described in the standard.

The RA forwards these outputs to the SEG that will evaluate the messages from a business perspective to ensure the buy-in of the future communities of users worldwide.
In general, the SEG will request the developer to perform some amendments that will trigger a new iteration of RA Quality Review and generation of XML schemas and documentation before SEG approval.

Once the messages are approved, the RA registers the messages and all new components in the ISO 20022 Repository and publishes them in the Catalogue of ISO 20022 messages.

In September 2010, the RA had already registered and published 359 messages or new versions of messages, an average of 62 messages per year!

OTHER TASKS OF THE RA
The RA is also the first line information, training and support centre for all ISO 20022 stakeholders: users, developers, Registration Management Group, Standards Evaluation Groups, software houses, etc.

It organised the kick-off meeting and training of all the other registration bodies and publishes scripted Powerpoint presentations that are updated every month on the www.iso20022.org.

The RA provides electronic copies of the message models and addresses numerous queries from users and implementers.

Since August 2010, the RA also provides a “Master Message Template” of each ISO 20022 message. The Master Message Template is an ‘intelligent’ spreadsheet which contains all the elements of the ISO 20022 message and allows user communities to indicate which elements they actually use and how. Master Message Templates are published in the Catalogue of ISO 20022 messages.

NEXT CHALLENGE: MIGRATION TO THE NEW EDITION OF ISO 20022
The new edition of ISO 20022, which is expected to be approved next year, will be 324 pages. Technical specifications have been refined and made more robust. Although the impact on users and developers is expected to be limited, the impact on the RA will be quite significant and require migration of the ISO 20022 Repository, building of new software and conversion of the vast majority of the outputs available on the ISO 20022 website.
The ISO 20022 Payments SEG, the Securities SEG and members of the RMG who participated in the Business Application Header Subgroup (BAH Group) identified the need for a Batch (File) Header whose purpose would be to provide a header for multiple business application messages which can span multiple message instances, and multiple message types.

During the implementation of the SEPA project in Europe, banks identified the need for a business application header that would contain the business sender and recipient of the message, message header creation date and time, digital signature of authorized business sender, which the business application needs to know before processing the rest of the Business Application Message.

In the absence of an international standard for business application header, various initiatives have used alternative standards, such as drawing on the ebXML message header. SWIFT raised the issue of BAH with the ISO 20022 RMG – describing the requirement for a business application header to be used in conjunction with a single Business Application Message at the New York RMG meeting in May 2007. The RMG established the BAH Subgroup to define the requirements for a Business Application Header. These requirements were reviewed by the ISO 20022 Technical Support Group (TSG) who under the instruction of the RMG developed the BAH to be used within ISO 20022; it was approved by the RMG on 15 April 2010 and can now be viewed on the ISO 20022 website at www.iso20022.org.

ISO 20022 messages and the BAH are designed to be independent of the transport protocol. The ISO 20022 standard does not provide any message transport conventions of its own (including header or trailer).

The Business Application Header is a business header and should not be confused with a file or transport header. It is created before the transport routing header is applied to the business message and is retained after the transport header is removed.

REQUIREMENTS FOR A BATCH FILE HEADER
Recently the ISO 20022 RMG’s TSG along with the BAH Subgroup was tasked to investigate and draft requirements for a Batch Header that is intended to provide a header for multiple related Business Application Messages sent as a group. These messages may be related by recipient (destination) or related by transaction type. The relationship of Business Application Messages within a batch is left to the implementers. The Batch header serves to identify the sender and receiver of the batch, the structure/contents of the batch, other data the application must know prior to processing the batch.

The BAH is used in conjunction with a single Business Application Message and is used to specify the business sender and receiver of the Business Application Message (which may be different from the sender or receiver of the physical message or file) and other data specific to the business transaction, and to uniquely identify the message. The Batch (File) Header would be used by the messaging application which will route the included Business Application Messages to the appropriate business service consumer.

In this regard the Business Application Header (BAH) and Batch Header (BH) are complementary but have distinct functions.
SEG REPORTS

Cards & Related Retail Financial Services SEG

By Chris Starr, Convenor Cards and Related Retail SEG

Prompted by the receipt of two business justifications from IFX and EPAS, and at the request of the RMG; TC68/SC7 formed a study group to investigate the potential for ISO 20022 to develop messages in the area of cards. In March 2008 the study group on standardization strategy for the card environment published its final report. The recommendations of the study group led to the formation of the ‘Cards and Related Financial Services SEG as well as WG9 of TC68/SC7.

The Cards SEG, as it has become more commonly known, was to analyse the exiting business justifications as well as any future submissions. It was envisaged from the outset that the Cards SEG should also provide a harmonization function across all submissions to as much as possible promote end-to-end interoperability between the different ‘domains’ of transaction processing.

The formation of TC68/SC7/WG9 was to work in the ‘domain’ of acquirer to issuer message exchange, the domain already covered by the existing standard ISO 8583. The intention was not to replace the ISO 8583 standard but offer users of ISO 20022 XML a migration path from their current authorisation and settlement systems to a common ISO 20022 platform in order to leverage their investment in payments infrastructure. However it is an important consideration that these two standards should be able to co-exist. ISO 8583 is now, and will continue to be for some time in the future, the foundation of most card messaging. With this in mind SC7/WG9 will need to define a co-existence and migration plan for ISO 8583 once the submission of its model and messages is complete.

THE PROJECTS

EPAS CAPE (Card Payment Exchanges)
The registration authority initially received a business justification titled “SEPA CARD PAYMENTS AUTHORISATION” from EPAS in September 2006. This was subsequently withdrawn in February 2007 at the request of the RMG and the business justification referred to the newly formed study group along with that submitted by IFX.

After the study group had finished its deliberations the business justification was re-submitted. At the first kick-off meeting of the Cards SEG, held at the SWIFT Offices from 23rd to 24th October 2008 both of the existing business justifications where presented. The EPAS CAPE justification was able to be endorsed by the Cards SEG towards the end of October 2008. With amendment later to cover ASN.1 syntax the business justification was accepted in its final form in October 2009.

The EPAS messages cover a set of card payment messages within the Acceptor – Acquirer domain for Point of Interaction (POI) transactions. The business justification also allows for the production of messages for a retail protocol, messages between a POI system and the sale system for large multi-lane retailers as well as for a terminal management system protocol for the updating of POI parameters, software and crypto keys.

The submission of messages for the first area, Acceptor to Acquirer POI messages has now completed all its stages and has been endorsed by both the evaluation group and Cards SEG as a whole. The messages are expected to ‘go live’ in the repository shortly.

This is an important step in the addition of card messages and components to the ISO 20022 repository. For the first time there are now components specifically related to the ISO 20022 Newsletter Winter 2010 26
cards business environment which are available to form the basis of subsequent submissions in the same business area. EPAS are to be congratulated on their efforts in bringing this submission to a conclusion.

IFX ATM INTERFACE FOR TRANSACTION PROCESSING AND ATM MANAGEMENT
The submission from IFX suffered the same fate as the initial business justification from EPAS as it too was held over to await the formation of the Cards SEG. The Business justification for this project was approved by the Cards SEG in November 2008.

The purpose of this development is to establish an industry-wide standard for the operation of ATMs. Today, ATMs are operated using a variety of proprietary message formats, all of which require different software to utilize. IFX is seeking to utilise one XML based protocol to produce interoperability allowing the possibility for one management system to support an estate of ATMs from diverse manufacturers.

Although the business justification promised candidate messages by quarter three 2008 these have yet to be produced.

TC68/SC7/WG9 ATICA, ACQUIRER TO ISSUER CARD MESSAGES
Formed as a result of the deliberations of the study group on standardization strategy for the card environment, WG9 has as one of its main tasks the reverse engineering of ISO 8583 into ISO 20022. The business justification was endorsed by the Cards SEG in October 2009 with an ambitious time line of completing its submission by the close of 2010. Although this date is beginning to look overly ambitious there has been the development of sample messages conforming to each of the ISO 8583 message types. As a whole the ISO 8583 standard has approximately 80 distinct message types although some of these are only repeat messages. This represents a considerable amount of effort. The vast number of messages is directly related to the business processes where the message itself determines the processing rather than its content. EPAS acceptor to acquirer protocol in comparison has only 15 messages.

The project now has to undergo a period of comparison and consolidation with the messages and components that have been submitted by EPAS. It is expected that this will lead to some rationalisation of the messages as well as the sublimation of some components from the CAPE project.

From this work it will become clear the challenges that will need to be addressed by the Cards SEG to ensure to as greater degree as possible the end-to-end harmonisation of the two projects.

THE FUTURE OF CARD STANDARDISATION IN ISO 20022
There is much work still to be done. EPAS has provided a sound footing upon which card messaging all the way from the POI to the Issuer can be resolved. Within Europe it is hoped that this will enable a clear path that can be exploited by those wishing to capitalise on their investment in XML infrastructure. ISO 20022 will be able to work along side the existing standard ISO 8583 to provide a more extensible structure which can provide more detailed rich messaging for use in businesses such as fuel and fleet cards as well as leisure and travel. Although these businesses are served by the current edition of ISO 8583 the restrictive nature of the bit map message structure has worked against the standard as international and national card scheme infrastructures have not found benefit in implementing later versions. It is hoped that by making ISO 20022 for cards a more flexible environment, able to react quickly to additional demands of the industry, the proliferation of implementations that has been seen in ISO 8583 can be mitigated. ●
It has been a summer of note for the Securities SEG. First, we have been joined by members of the Singapore standards community, and Amod Dixit, from Standard Chartered Bank in Singapore has joined the SEG management team as vice convenor. Welcome to all these and other new members.

This summer has also seen our first full maintenance cycle. Although there have been change requests on both proxy voting and funds order routing in the past, this was the first time that the annual cycle of change touched nearly all securities domains. Changes were received for messages in the funds, settlement, issuer agent, and corporate actions areas.

There were two drivers for change to which it is worth paying special note. The first was the results of ISO 20022 Registration Management Group (RMG) policy decisions that needed to be incorporated into messages, such as the use of Business Application Headers (BAH), changes to the use of the BIC, and changes to how ‘supplementary data’ can be conveyed. The latter two were uncontroversial, but the decision on whether to remove message components duplicated in the Business Application Header was felt to be dependent on the overall approach of the financial community, not just the Securities SEG. The Payments SEG was contacted to gain a view as to the eventual global usage of the BAH.

The second driver for change was the Eurosystem’s settlement platform Target 2 Securities (T2S). Seven requests were submitted by Deutsche Bundesbank in respect of T2S. The Securities SEG is anticipating a large number of new message submissions from the same source going forward.

The process of maintenance was also of interest, particularly where changes overlapped with ISO 15022. SWIFT’s Maintenance Working Group and the Securities SEG were required to work in concert to ensure consistency of the requests and, ultimately, of the changes to the existing messages. SWIFT and the Securities SEG management team will review the process in the coming months to see what lessons may be learned for next year.

Now that maintenance has been completed for the year, the Securities SEG can look forward to submissions from the securities industry, including, among others, SWIFT, FPL, ANBIMA, and the National Central Banks building T2S.
Summer 2010 presented a number of challenges and architectural issues for the Payment SEG. Our payment schema are actively being adopted by various parties around the globe, the most visible being the use of SEPA in the European market, but many more have adopted or are considering these new standards.

Fueled by this increasing visibility, a number of changes (including external code requests) have been received. Concerns over the impact of change to those already live with Payment schema are manifest in a cautious approach to change proposals.

**CHANGES IN PLAY IN 2010**
- Standard maintenance requests: The Payment SEG has received and reviewed a number of Change Requests proposing changes to the schema. Twenty changes were proposed, 17 accepted.
- Having reviewed the accepted change requests, it was decided to defer all to a subsequent maintenance cycle (likely next year) to reduce the frequency with which adopters must address changes. The PaySEG is conscious of the impact of changes to its users and would like to minimize them where possible. Discussions were conducted with submitters to confirm requests could be deferred.
- One rejected change requests (CR17) addressed securities industry requirements for remittance information to be communicated from remitter to beneficiary to support fund accounting and similar requirements. The change requests involved a separate enhancement to the cash notification request message, which are expected to receive further attention and be the subject of a revised proposal by or before the next maintenance cycle.
- Architectural issues: Two additional change requests, Cross SEG Harmonization Group related whitepapers required further scrutiny to form a response:
  - BAH – BAH provides a header to be used with all ISO 20022 schemas. Business Application Header is now the default requirement for new requests for these schemas, and is required to be retrofitted to existing schema barring exception from the submitters. The PaySEG reviewed a change request addressing how to retrofit the Business Application Header which was returned with a request for a rework. While this is still a work in progress, the expected conclusion will likely see all existing schema retrofitted to existing schema without revision to the underlying schema. And thus allow data elements appearing in both BAH and the schema to be duplicated.
  - BIC – With recent changes to the BIC, revision to the use of BIC in Payment schema is required. This change was the subject of one Change Request and is now under review.
- Additional issues with architectural implications include a proposal by the ECB to normalize architectural elements of payment and securities schema in the interest of further harmonization beyond that currently defined by the standard. Substantially attractive, the proposal would require substantial revision to existing schema as well as changes by those who have implanted the payment schema thus far. The Cross SEG Harmonization subgroup has been asked to proactively consider design tenants which might be aligned in future.

**ADDITIONAL NEWS REGARDING EVALUATIONS**
- CPAR Evaluation - The issue raised during the CPAR evaluation have been addressed to the submitter’s satisfaction and the evaluation has been successfully completed and accepted by the SEG. Publication of this new schema is expected shortly.
- Cash Notification Request Evaluation – This evaluation is coming to a close. It is expected that further changes may be necessary in a subsequent maintenance cycle as Securities and other requirements are addressed.

**KEY ISSUES AND CHALLENGES CONFRONTING THE PAYMENT SEG GOING INTO 2011**
- The advantage to be gained through strategy and planning, use of a roadmap or similar device to help guide our efforts
- The generic need for extended remittance as defined by the remitter and the beneficiary; as is the case with the securities industry requirements still under discussion.
- Industry adoption of the standards: Common Global Implementation and other efforts seek to make these standards more accessible and more useful.