



Everybody benefits from standardizing the ISO 20022 standard

Payments and securities market infrastructures are working with SWIFT to ensure greater consistency in the way the ISO 20022 messaging standard is implemented. According to Andrew White, formerly general manager, settlement services, at the Australian Securities Exchange (ASX), greater consistency will release significant benefits for market infrastructures and their users.

At 8.00 a.m. on Thursday 2 October 2014 an eclectic mix of central banks, payment associations, central securities depositories (CSDs) and payment clearing houses drawn from Africa, Asia, Europe and the Americas, gathered together in Boston, Massachusetts. They did so for two reasons. The first was to have breakfast. The second was to discuss how best to guarantee a higher level of consistency in the implementation of the ISO 20022 messaging standard.

That initial meeting was followed by a summit at the end of April 2015 to agree the way forward. In both cases, these gatherings broke down barriers between two industries that, like the parallel universes of modern physics,

have somehow managed to be both adjacent and invisible to each other: payments and securities. By bringing representatives of the payments and securities market infrastructures together to consider how the ISO 20022 messaging standard could be implemented consistently, the twin meetings have overcome more than cultural and historical differences.

The subject of their deliberations is a vital one. Consistency in the implementation of the ISO 20022 messaging standard matters a great deal. Unless the standard is implemented in a broadly homogeneous fashion, many of the benefits to both financial market infrastructures and their users will be hard to capture. This is because



inconsistencies increase the risks of project implementation.

Consistent use of ISO 20022 reduces implementation risk

Consistency mitigates that risk in seven principal ways. First, it enables market infrastructures to predict and control the costs of their and their customers' implementation. Development is more easily aligned with budget cycles, which SWIFT users are already familiar with from their existing SWIFT FIN MT and ISO 15022 message maintenance processes.

Secondly, implementing ISO 20022 consistently across market infrastructures reduces the cost of customer connectivity with market infrastructures, and the costs of maintaining and upgrading those interfaces over time. As Edwin de Pauw, head of product management, Europe, at Euroclear, puts it, consistent adoption of the ISO 20022 standard can "avoid solving common problems in different ways."

Thirdly, market infrastructures are able to implement changes in a way that matches industry best practices.

Bob Masina, head of technology and operations at the Australian Payment Clearing Association (APCA), says "the cost of implementation for participants, and alignment with global best practice, are key factors in a successful roll-out."

Fourthly, with a consistent implementation of ISO 20022, market infrastructures are able to provide their customers with standard, proven message specifications for testing, even before their own system developments are complete.

Fifthly, market infrastructures can provide a familiar environment for customers, and thereby reduce the time and effort spent on educating stakeholders and readying market participants for the change. Familiarity also increases the likely take-up of new services by customers. "Harmonization is necessary to reduce the learning curve for the market," explains Bernard Lenelle, senior vice president in product management at Clearstream.

Sixthly, market infrastructures are able to use a consistent messaging standard to provide an end-to-end, fully automated, straight-through-processing solution. In fact, consistent adoption of ISO 20022 increases the predictability of business

processes and, as a result, increases rates of automation and straight-through-processing.

Seventhly, consistency in the implementation of the ISO 20022 messaging standard increases the scope for inter-operability between different market infrastructures. Wilfree Ho, chief information officer at Hong Kong Interbank Clearing Limited, describes this inter-operability as "critical."

Market infrastructures have less incentive than banks to be consistent

Some of these benefits are already familiar to market infrastructures from their implementation of the SWIFT FIN MT standard. This is because the MT standard was first used principally in bank-to-bank activities such as correspondent banking, before being adopted by market infrastructures.

Bank-to-bank business creates "many-to-many" networks, which entail participants using highly automated straight-through-processing to exchange high volumes of

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Figure 1: Countries with ISO 2022 initiatives led by market infrastructures, live and planned

messages with each other. This cannot work unless all participants are using the same version of each message and upgrade at the same time, creating a natural pressure to converge on common practices.

That natural pressure ensured that the SWIFT FIN MT standard evolved in a predictable way, with an annual maintenance process culminating in a cut-over every November to the latest version of the standard. The adoption of the ISO 2022 standard, by contrast, is being driven mainly by market

infrastructures, especially in payments and corporate actions messages. Infrastructures work to a “one-to-many” or “many-to-one” model rather than a “many-to-many” model.

In an environment in which single market infrastructures are exchanging messages with multiple customers, each market infrastructure is free to choose - in conjunction with its users - which version of a message to deploy, and when to switch to the newer version. Moreover, market infrastructures are also free to impose their own market

practices and rules to govern how their participants actually use the messages.

This potentially leads, as ISO 2022 implementations proliferate around the world, to a high degree of variability in the ways in which the standard is used. Already, there are multiple versions of the same message, different market practices and rules, and asynchronous release cycles. This variability threatens to undermine the ability of the standard to deliver greater flexibility in transaction processing, richer information, lower costs, reductions in risk, and inter-operability between market infrastructures.

Users of market infrastructures need a global standard

In short, the ISO 2022 implementation process is at risk of creating a variant of the problem Andrew Tanenbaum identified as a major obstacle to the successful networking of computers: “The nice thing about standards is that there are so many of them to choose from.”

The present degree of variation is causing connectivity problems and additional costs for global users of

market infrastructures. “We need to be clear about the problem we are looking to address,” as Arthur Cousins, the former chief executive officer of the International Payments Framework Association, has explained. “The global financial institutions are facing the problem of version proliferation.”

It is because it is creating problems for users of market infrastructures that achieving consistency in implementation of the ISO 2022 messaging standard is so important. The ultimate aim must be for customers that interface with multiple market infrastructures around the world – whether they are central banks, clearing houses or CSDs – to be able to do so in a consistent fashion. “50 flavours of ice cream is fine, but not for standards,” says David Renault, head of STEP2 services at EBA Clearing.

Since market infrastructures are the source of the problem of variation, it might seem counter-intuitive to argue that it also makes sense for them to take the lead in solving the problem. However, this responsibility must fall to the institutions that are taking the lead in the adoption of the ISO 2022 message standard - and that means the market infrastructures.

ISO 20022 is the default standard for market infrastructures

No fewer than 200 of the ISO 20022 initiatives currently in train around the world are being sponsored by market infrastructures (see Figure 1). According to SWIFT, although market infrastructures currently account for less than 10 percent of total SWIFT message flows, this proportion is forecast to increase to 25 percent by 2018. By 2020, 30 percent of that share of messaging is expected to be couched in the ISO 20022 format. ISO 20022 is definitely emerging strongly as the default messaging standard for market infrastructures around the world, domestically and internationally, and in the securities as well as the payments industries.

Market infrastructures must lead the campaign for consistency in ISO 20022 implementation

Given this demonstrable leadership role, market infrastructures are the obvious leaders of a global campaign for greater consistency in the implementation of the ISO 20022 standard. The meetings of October

2014 and April 2015 were the starting point. At the meeting in April 2015, market infrastructures agreed to work with SWIFT on a four-fold strategy for enhancing the level of consistency.

First, a common platform will be provided for the publication of information on messages implemented, new versions of messages, and new version release cycles. Secondly, the use of harmonized global market practices will be promoted by market infrastructures operating in the same business domain, whether it is payments or securities. Thirdly, a common standards release cycle, aligned with existing financial industry processes, will be agreed and promulgated. Fourthly, implementation support will be provided to users of market infrastructures, especially in the fields of testing and connectivity. Figure 2 illustrates the four elements of the strategy.

This four-dimensional strategy aims to bring consistency to the implementation of ISO 20022 in a way that benefits users without sacrificing the flexibility market infrastructures need to deal efficiently with their own participants. It acknowledges that



Figure 2: Four-fold strategy for ensuring ISO 20022 roll-out consistency

differences in market practices are sometimes necessary to take account of local regulatory and tax regimes and other individual circumstances.

But the strategy is also based on the knowledge that local variations are often no more than accidental: a result of independent groups specifying different ways of using the ISO 20022 standard to achieve the same objectives. "All markets have their unique aspects," as Richard Dzina, a senior vice president at the Federal Reserve Bank of New York, points out. "But variations in practice that threaten harmonization objectives need to be classified as 'convenient' or 'essential,' with those in the 'convenient' category subject to greater scrutiny."

A five step programme towards global harmonization of ISO 20022 implementation

To implement the first stage of the four-pronged strategy, market infrastructures agreed with SWIFT a "maturity model" for ISO 20022 harmonization. It lists five incremental steps a market infrastructure should take towards achieving a harmonized implementation of ISO 20022. The steps will be followed by market infrastructures through information published on MyStandards, the collaborative standards platform owned and operated by SWIFT.

Market infrastructures can choose how quickly or slowly they progress

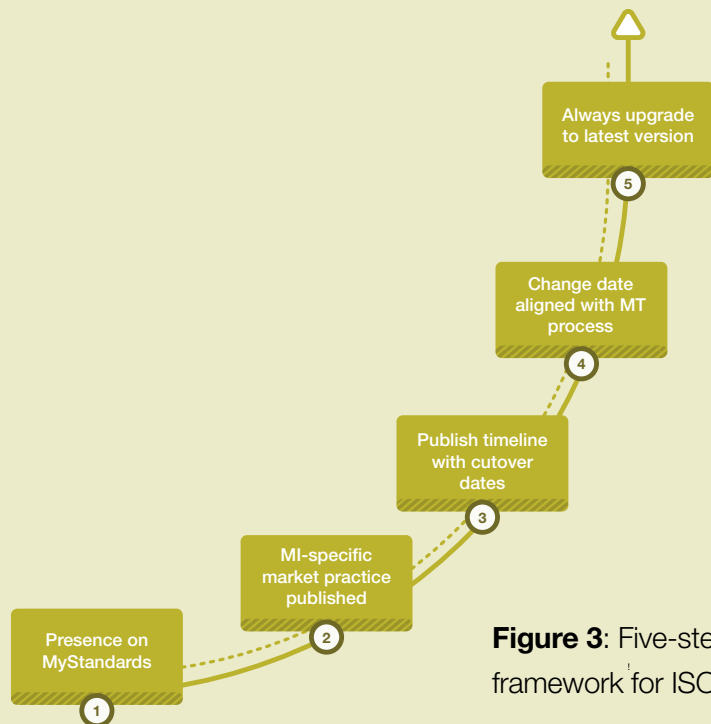


Figure 3: Five-step implementation framework for ISO 20022

through the five steps to ensure they remain fully up-to-date with each fresh release of the ISO 20022 standard. Each step will build incrementally on the previous one towards a greater level of overall consistency, as illustrated in Figure 3.

By the first quarter of 2016, the MyStandards platform will be enhanced with new functionality that will enable each market infrastructure to publish a summary of its ISO 20022 capabilities, including the number of ISO 20022 messages types that are supported. This will enable market

infrastructures to view the current ISO 20022 capabilities of other market infrastructures, and compare where they stand relative to their peers.

The objective of the service is to cover each and every one of the 200 ISO 20022 initiatives sponsored by market infrastructures around the world today. Collection of the necessary information has already begun. By making market infrastructures using ISO 20022 aware of the progress of others implementing the standard, a set of global best practices will evolve and mature.



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In agreeing to follow this “maturity model,” market infrastructures recognize that they are all at different stages in terms of their familiarity with ISO 20022, and that they will not all be ready or able to implement every step at the outset. This is especially true for those embarking on the implementation of ISO 20022 for the first time.

However, the “maturity model” also recognizes that any step taken by any market infrastructure is capable of benefiting the wider global community of market infrastructures and their users. While providing a means of sharing that knowledge, the MyStandards platform will also encourage market infrastructures to take progressively more demanding steps.

Eventually, global market infrastructure-specific best practices for ISO 20022 implementation will be published. At that point - which is synonymous with reaching the second stage in the ‘maturity model’ - market infrastructures will be able to measure and declare their degree of alignment with best practice. The Payment Market Practice Group has already published

Implementation Guidelines for Use of ISO 20022 within High Value Payments Systems. “In 2017 TARGET2 will implement ISO 20022 in line with this like-for-like based market practice before moving to a broader usage of the standard in successive community-agreed phases,” confirms Sylvain Debeaumont, head of the operations and data analysis section at the ECB.

The steps that lie beyond the second stage of the ‘maturity model’ – timelines with cut-over dates, alignment with the current SWIFT FIN MT message upgrade cycle of November each year, and the commitment always to adopt the latest version of ISO 20022 – require more work. However, information on ISO 20022 version changes will be published on MyStandards in April each year, well ahead of the November deadline for SWIFT FIN MT upgrades.

Market infrastructures support the case for a new approach

Market infrastructures are enthusiastic about the potential of

the five-step programme to achieve harmonization. “The discipline of release synchronization has clear benefits,” says Sergey Putyatinskiy, chief information officer (CIO) at the National Settlement Depository (NSD) in Moscow. Jette Simson, head of EURO1/STEP1 service maintenance at EBA Clearing in Paris, adds that “the benefits of an annual cut-over, aligned with FIN MTs, apply to everyone.”

The five-step maturity model will be the subject of further discussion at Sibos Singapore in October 2015, but the course towards harmonization of the implementation of ISO 20022 by the market infrastructures of the world is now firmly set. To adapt the metaphor used by David Renault, the market infrastructures of the future will have fewer flavours of ice cream to choose from, but the ice cream they do have will be of higher and much more consistent quality.

“Driving the industry towards a truly global ISO 20022 standard” at Sibos

Tuesday 13 October 2015
15:30-16:30 p.m.
Conference room 1