



ISO 20022: The good, the bad and the better

You would think from the many articles, discussion panels and chaotic clamour regarding ISO 20022 in recent years, that it was the new kid on the block.

However, ISO 20022 has been slowly embedding itself for over a decade; first taking root in the payments domain and gradually spreading into securities, trade finance and even cards. But to some the standard still feels as new as the day it was first published in 2004. Whilst the benefits of a single financial messaging standard are wide-reaching, the challenges can often be daunting. The Clearing House in the US recently launched a nationwide real-time payments system based on ISO 20022 messages. For a market as diverse as the US the advantages of ISO 20022 may take some time to come to fruition and whilst the standard is thirteen years old, it may need to re-evaluate whether it meets the new challenges of the payments industry.

So, what is ISO 20022?

ISO 20022 is an international standard that defines the International Organization for Standardization (ISO) platform for the development of financial messaging standards. It was developed to facilitate electronic data interchange between financial institutions. ISO 20022 is a single, common 'language' for all financial communications – no matter where a business is based. It allows participants and systems in different markets to 'talk' to each other using consistent terminology and formatting.



A useful analogy to better understand ISO 20022 is Lego. Whilst all the pieces are well defined and can fit together, the builder can build whatever they desire or require using consistent, defined pieces that can be utilised and understood by anyone and everyone. This is what ISO 20022 is. It defines the pieces and the financial services community fits the pieces together into financial messages that serve the needs of users, e.g. payment initiation, clearing and settlement etc. ISO 20022 provides a common development methodology, a common process and a common repository that can be used by all financial standards initiatives. This methodology offers an efficient, cost-effective and fast way of developing and implementing message standards that serve as the basis for long-term financial services solutions.

Why does it matter?

The central aim of ISO 20022 is to avoid the duplication of effort and messages being developed in parallel by global initiatives. One way this is achieved is through a very well documented, freely and publicly available repository that can be reused on a universal scale by all communities of users online to ensure maximum transparency. Business experts and future users are involved at an early stage to ensure all business requirements are addressed – this is a critical factor in ensuring the quality of the standard. Furthermore, a strict registration process helps to avoid redundancy and ensures the right priority of developments.

In practice, financial institutions exchange massive amounts of information with their customers and amongst themselves in the course of delivering the services we all use every day. ISO 20022 offers a more efficient and flexible way of developing and implementing message standards that can serve as a basis for long-term solutions and innovation.

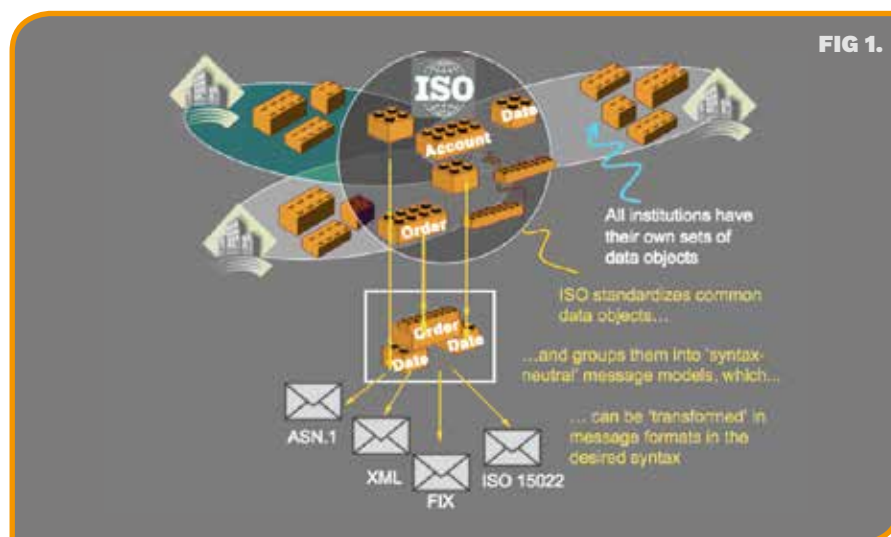


Fig.1 courtesy of ISO 20022 Registration Management Group



“One thing ISO 20022 is not is a cookie-cutter”

The above describes one single standardisation approach, comprising a common process and a common repository that can be used by all financial standards initiatives. One thing ISO 20022 is not is a ‘cookie-cutter’ that forces everyone to implement their solutions in exactly the same fashion. It is the approach itself that is uniform and clearly defined - how jurisdictions, regions or initiatives choose to implement this approach is their choice. This provides the flexibility necessary for a truly global standard to work and is a clear benefit.

Benefits of ISO 20022

ISO 20022 is a truly open standard with a wide user community. Anyone can access the ISO 20022 data model, with all its message components as well as the full messages online. What’s more, any organization can submit a new message or change to an existing message based on business requirements. And the new ISO 20022 Registration Management Group (RMG), any organization with a legitimate interest in ISO 20022 can join the Group or its subgroups. This is an exceptionally powerful tool to widen market knowledge and educate.

An approach commonly taken by standards-setting bodies is the concept of Reasonable And Non-Discriminatory (RAND), which is focused on good governance, transparency and openness. Open and transparent processes are vital to maintain a balance of interests between industry participants.

Because of its openness ISO 20022 has been seen as a facilitator of regulatory and industry objectives. Market infrastructures (ACHs, RTGS, CSDs, stock exchanges, etc.) are adopting and pushing developers to embrace the ISO 20022 standard for the benefit of their common customers. Many regulatory initiatives such as MiFIDII, Basel III, PSD2 and FATF, all look for open standards to support their harmonisation of business practices, and many see ISO 20022 as an ideal formula.

Other key benefits include:

- Wide user community means that a variety of technical solutions have been developed and can be bought and used at relatively low cost and time to market
- Data harmonisation – due to the well documented ISO 20022 data dictionary, the data model can be reused for other key industry programs such as API development
- Flexibility – the standard can be tailored to domestic business needs whilst still retaining a universal understanding
- Improved industry interoperability and Straight Through Processing (STP) as there is less need for data manipulation. It also reduces the complexity, cost and risk of data manipulation and conversion in the inter-bank space and between banks and their customer
- There can also be increased interoperability between markets and currencies
- Increased data carrying capacity; ISO 20022 allows unlimited data carrying capabilities within the message, it is up to the user community to restrict based on technical capabilities and business need



Challenges of implementing ISO 20022

The lack of prescription and rigidity is seen by some as a flaw of ISO 20022. Some believe that it allows for different flavours and ultimately leads to fragmentation in implementation that doesn't achieve the desired outcome. This conclusion is somewhat skewed as the desired outcome is not that every country or region must ascribe to the same implementation; countries can implement the standard differently to suit their business needs, so long as it is documented in a clear, consistent and common way and can be understood in cross-border scenarios. Retail banking and payments are highly domestically focused and as such the standard will need to accommodate these differences, e.g. in the US there is a higher degree of regulatory reporting required.

Understanding the basic premise of ISO 20022 is vital in coming to terms with where it fits in the future and how it can be used. ISO 20022 started with a focus on international (cross-border) financial communication between financial institutions, their clients and the domestic or international 'market infrastructures' involved in the processing of financial transactions. However, we have seen a strong move to use ISO 20022 for the development of new domestic financial messages as well. There has been a strong emphasis on reusing ISO 20022 investment that may have been made elsewhere to streamline all communications for financial institutions.

There are clear challenges when countries embark on a domestic ISO 20022 project for the first time. For example, in the US, the diversity in financial institutions poses significant education challenges. Whilst the Tier 1 banks may have already implemented ISO 20022 as they are engaged in other markets where it is required by regulation (e.g. the European Union) or they have large corporates that have requested it, smaller local and regional banks are unlikely to have come across the standard before. This huge gap in understanding is difficult to bridge. Most organizations will not have the resources and expertise to take on an ISO 20022 project on their own.

The challenge posed by a lack of education and how to combat it

There are three main ways to do this:

1. Greater engagement and education from a central source. This typically takes the form of a national banking association representing national interests at international standards bodies such as ISO. The information gleaned here can help during domestic implementation;
2. Technology vendors. Whilst some regions have much more experience others are fairly new to the standard – including the United States, Canada and Australia. The vendor community have vast experience in implementing ISO 20022 compliant solutions to all different sizes of financial institution;
3. Education within your organisation. There are many online resources that can help lay the foundations.

Clear understanding of the benefits of ISO 20022 needs to be thoroughly and carefully explained, with by-in taking longer among the smaller and more domestic financial institutions and corporates.



It is important to educate the corporate or SME on ISO 20022. They are a key user of the payments system both in the US and globally. They too can benefit from usage of the standard. Engagement with Corporate Treasury Associations and small business associations is vital.

There is no doubt that there are greater inherent challenges in migrating a legacy system to ISO 20022 than building one from scratch. So much so that nearly all ISO 20022 programs have been green-field.

ISO 20022 in the Unites States

ISO 20022 has been spoken about for many years in the US, but it has only recently become a reality. Whilst some large banks have been using ISO 20022 with their large corporates for some time, the launch of The Clearing House's real-time payments platform has brought ISO 20022 to the interbank space. The Clearing House's solution uses a variety of ISO 20022 messages, including ones for the request-for-payment functionality. There are a number of issues when implementing ISO 20022 in a country such as the US, with its fairly disparate financial services industry, but it also means there are a great many benefits.

The learning curve associated with ISO 20022, particularly the interpretation, application and integration with U.S. formats, can be particularly daunting. ISO 20022 is generally considered more user friendly than legacy formats but is a significant jump from the NACHA file formats and EDI formats that have been in use for over four decades in the US. The guidance on these formats is well documented. However, cohesive information on XML and ISO 20022 focused on US payments has been lacking. The terminology used by ISO 20022, terms such as debtor account and creditor account are virtually unknown in the US – where a creditor typically refers to an organisation that lends credit to an individual or business – which leads to much confusion.

For many years, due to some corporate demand for ISO 20022, banks were creating their own mappings to NACHA formats for ISO 20022 payment instructions, which led to a divergence in implementation practices. To help facilitate harmonisation of market practice, NACHA released the ISO 20022 Mapping Guide and Tool in April 2015.

Understanding ISO 20022: a far from level playing field

Education does not stop at the bank. Corporates and SMEs stand to benefit from ISO 20022 just as much, therefore education and awareness of corporate customers is vital. Multinational corporates that are plugged into many markets are likely to be much more familiar with ISO 20022 due to the SEPA Regulation in Europe, therefore they have at least some expertise to drawn upon. They may also be participants of industry forums such as the Common Global Implementation Market Practice Group, aimed at harmonising around corporate usage of ISO 20022. However, domestic companies have a much bigger hill to climb. Today's US NACHA mixed batch file of credit transfers and direct debits cannot be transmitted in a ISO 20022 process flow and require two separate flows.

Syntax can also be a challenge. XML is the most commonly used syntax for ISO 20022. And this is widely acknowledged to be simple to grasp. However, XML is a fairly verbose language that for a small bank, who may not have high-tech I.T equipment can be intimidating. However, the ISO 20022 data model can be used with any syntax, including JSON (the JavaScript Object Notation) and still be compliant.

Additionally, thanks to ISO 20022 becoming more common the world over, vendors are creating cheap and easy to use ISO 20022 based applications.



Where do we go from here?

A challenge particular to the US is that the move to ISO 20022 is not wholesale and not part of a consistent strategy across the payments space. Most other countries are implementing ISO 20022 as part of a major payments infrastructure renewal, in Canada, Australia, the United Kingdom, or at least have a commitment to implement ISO 20022 across all its domestic electronic payment systems over a given period. The US, so far at least, has had a relatively piecemeal approach. The Clearing House has adopted ISO 20022 as part of its real-time payments project but not for its other payment types (ACH and CHIPS); the Federal Reserve made commitments to a 2020 rollout for ISO 20022 for wire and chip payments; while NACHA has so far made no firm commitment to move to ISO 20022. All this leads to a confusing picture for the US market when it comes to the standard. It is more challenging for smaller US financial institutions to buy into ISO 20022 when there hasn't been any clear wholesale industry commitment to move to the standard, which in turn can make it difficult to build in resource, knowledge and planning.

Everybody else is doing it so, why aren't we?

It is difficult to fully assess the benefits of ISO 20022 as some are still to reach fruition. Additionally, the benefits and risks might not be the same for every country. For example, ISO 20022 was not the end-game for SEPA but a facilitator for many other areas, such as the formation of a pan-European payments system and the abolition of the need for a bank account in each member state if you wanted to transact in that state. This is said to have translated into serious efficiency gains for corporates. However, ISO 20022 in and of itself is not the direct cause but a facilitator.

A major inhibitor to grand scale adoption of ISO 20022 has been the lack of a business case for migrating to a standard. So, it has to be seen in context with the benefits that can be achieved post-implementation through the lens of one's own business. Adopting ISO 20022 is bigger than just swapping out one format for another – it has the potential to be the foundation for value-added services. Can you offer more innovative corporate and/or SME solutions? Can you reduce cost and complexity associated with your current ERP system because you can buy cheap ISO 20022 compliant solutions? Can greater data carrying capabilities allow you to offer better services to your retail customers? These amongst many others are the questions that need to be asked when considering implementing ISO 20022.

Recognising the strategic benefits of ISO 20022

In the past, standards have often been seen as 'too technical' and one for the IT team. Standards are now being discussed in board rooms and strategy sessions. Don't get me wrong, board members will not be sitting around a table discussing data fields but standards are a key feature of the future environment and are often discussed in the context of facilitating change and innovation. Equally, standardising for standardising's sake is never advisable; there needs to be a requirement, or set of requirements, that ISO 20022, or any standard for that matter, addresses and a focus on the strategic objectives before any decision is taken to use ISO 20022.

Implementing a standard for the sake of it is costly and of no benefit, hence a business case for it is impossible. A more benefits driven approach is needed.



However, some countries have got around this issue by mandating its usage. For example, in the European Union, the use of ISO 20022 was mandated as part of the SEPA regulation in 2008. Others have brushed the issue of a business case under the carpet as the implementation has been rolled into a greater program of payments system restructuring. Regulation can be helpful to solidify what could be seen as inevitable and in the case of the EU due to there being 28 member-countries, regulation was most likely a pre-requisite to get the reach and ubiquity necessary to receive the benefits. However, in other markets regulation may hinder rather than help. Regulation forces the industry to comply with a strict timeline that may not always be in the best interests of implementation.

Every continent (excluding Antarctica) has at least one country that is using ISO 20022 for upgrading existing payment systems or building new ones. In a time not too far away, ISO 20022 will be used for emerging cross-border payment schemes since it enables interoperability between domestic payment systems built on the same foundation. ISO 20022 is not going away, so it is vital a plan for adoption is incorporated into any business strategy in the future.

Icon Solutions Instant Payments Solution

To respond to the demand for ISO 20022, Icon Solutions has developed a solution that is not just suited for global Tier 1 banks.

There is an increasing need and desire for ISO 20022 compliant technology from all corners of the payments domain. IPF, Icon's Instant Payments solution, is a light weight software that throws out the old philosophy that 'rip and replace' is the only way to implement new functionality. IPF offers a faster and more cost-effective path to accessing The Clearing House real-time payments system. US customers are able to expedite their adoption of instant payments, adapt quickly to changes in the payments landscape and keep ahead of their competitors. IPF also enables connectivity within the European Union and other markets.

IPF enables you to process instant payment transactions 24/7, from any channel to Payment Network, quickly and cost-effectively. IPF is easy to integrate with your existing ledgers, screening and fraud systems, and provides full operational monitoring and control. Transactions can be enquired on in the IPF database and exported to a data warehouse for reporting and analytics.



To find out more about IPF

 iconsolutions.com

 +44 207 147 9955

 info@iconsolutions.com

