**INTEGER WEALTH GLOBAL**

ISO 20022 – What is it and How Does it Work.?

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Banks and financial institutions globally are entering a new era, as they prepare to transition their payment systems from using SWIFT messages exchanges network (known as ISO 15022) to the new, highly structured and data-rich ISO 20022 financial messaging standard.

Over the next three years there will be a co-existence window where both ISO 15022 and ISO 20022 message standards will run.

By 2025 ISO 20022 will be the universal standard for high, or large-value payments systems of all reserve currencies. In Europe, SWIFT and the European Central Bank have announced ISO 20022 go-live dates of March 2023 for the standard.
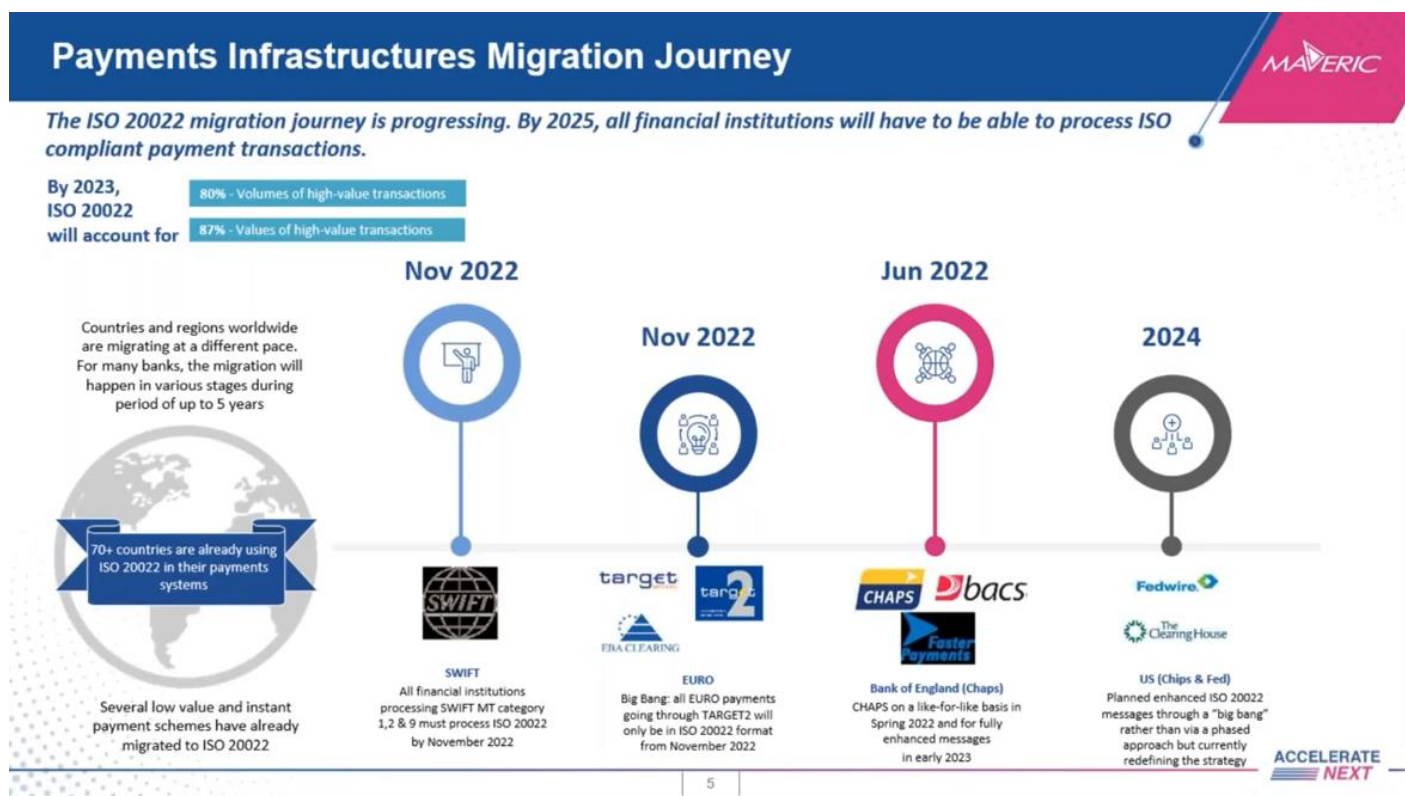
With international money transfers amounting to trillions globally each day, SWIFT codes exist to ensure the safety, security, and straight through processing of all those transactions.

What is ISO 20022 exactly.?
ISO 20022, first introduced in 2004, is an international standard for relaying electronic messages between financial institutions.

It was created to give the financial industry a common platform for sending payments messages and exchanging payments data, using a central dictionary, a standard modelling methodology, and a series of Extensible Markup Language (XML) and Abstract Syntax Notation (ASN.1) protocols.

Why standardization is important

Standards are a critical factor when initiating financial transactions and reporting financial activity. An international standard is a way to simplify interoperability between service providers and clients, and enable the efficient, consistent and secure exchange of files.

Traditionally, large global financial institutions have had tendencies to develop, approve and implement standards without seeking input from other organizations. This has resulted in inconsistency, and a lack of customization, leaving overwhelmed IT departments with the task of handling on-boarding, testing and managing ongoing partner relationships.

The ISO 20022 financial messaging standard was designed to remedy this, as a flexible framework providing an internationally agreed business message syntax, where user organizations and developers will use the same message structure, form and meaning to exchange transaction information globally.

What are the benefits of ISO 20022?

Global adoption of ISO 20022 will create a common language and model for payments data. It will provide higher quality data which translates to better quality payments for everyone in the financial industry, with an open standard that can adapt to changing needs and new approaches. As it will not be controlled by a single interest, it can be used by anyone in the industry of financial services and implemented on any network. Key benefits include:

Richer, more granular data

Having enriched data at their fingertips will enable financial organizations to deliver a faster and improved service to its customers while developing new, tailored products based on analysis of customer behaviours. Increased flexibility and better data also means more competition in the financial sector, potentially leading to product innovation.

Better transparency and visibility

More transparency with more remittance information leads to better customer experience. Enhanced visibility and real-time perspective of liquidity flows, will provide stronger forecasting capabilities. This means financial services organizations can adopt an agile approach and better manage and control their liquidity.

Better integration and compliance

Using modern, mainstream XML technology ISO 20022 will reach every market infrastructure and payments system to pave the way for more efficient integration. Improved analytics, requiring less manual intervention will result in a more accurate compliance process, improved security and fraud prevention.

Improving STP rates

By acting as a common language among worldwide integrated systems and establishing an identical format of processing at all levels of the chain, ISO 20022 dramatically improves Straight Through Processing (STP) rates and reduces maintenance costs for all the formats.

In the payments industry, efficiency is typically measured by assessing the level STP - or the percentage of transactions that are passed straight through the system from start to finish without manual intervention.

Regulatory and security enhancement
The higher level of detail required, and the identical standards, protocols and formats implemented allow better regulatory reporting, more secure payment information and customer data to inform business strategy and streamline security procedures. It also allows for more efficient sanctions & AML validations as well as more effective claims & investigations.

Creating potential new revenue streams
It improves liquidity management by providing a new level of financial communication. The ability to capture more data in a uniform way, it enables the adoption of data analysis solutions and added value services that can provide customer insights and generate new revenue streams for banks, for example Request to Pay and e-invoicing.

Standardizing non-Latin alphabets
An important consideration is that the standard will allow longer references for non-Latin alphabets, with a character set ten times larger than MT messages, and carrying a great deal more information. This is a functionality that was widely explored in China.

Harmonisation
Over 70 countries have already adopted ISO 20022, so messages will be harmonised with payment systems around the world.

Analytics
Enriched data will improve analytics. More efficient data collection may improve decision making.

Resilience
ISO 20022 will be used across many payment systems. This improves resilience by allowing re-routing of messages to reduce the impact of outages on users.

Straight-through processing
Less need for banks to make manual interventions. Potentially fewer delays for the end customer.

Compliance and regulation
Richer data will make it easier for businesses to detect fraud and help target financial crime.

Competition and innovation
More flexibility means more competition and innovation in the financial sector. Better data may lead to product innovation.

Flexibility
ISO 20022 can adapt more easily than current messaging standards. So it's more responsive to changes in the economy, emerging technologies and innovation.

Enriched data
More data can be carried. It enables more detailed and better structured reference information.

How IR Transact's High Value Payments can help
The benefits of ISO 20022 will provide are valuable, but complex to decipher on older legacy systems. This is where IR Transact's High Value Payments solution can help. Our solution provides a single dashboard to monitor the health of your high value in-flight transactions across payment queues and delivers and end-to-end view of transactions impacting associated bank accounts.

What will be the impact of the global adoption of ISO 20022?

It's expected that this worldwide adoption of this type of financial messaging will have a profound impact on financial institutions, corporations, and any business with a stake in financial services and the large value payments industry.

ISO 20022 is the only way to go into the future as it is the most comprehensive financial data standard in existence today.

Over 70 countries have already adopted ISO 20022 in their payment systems including Switzerland, China, India and Japan. And with over 200 payment types in scope, ISO 20022 will harmonize formats and data components from different payment methods that could not previously work together.

ISO 20022 will apply to domestic, ACH, high value and cross-border payments.

## What banks need to do (and quickly)

As deadlines approach, banks are coming under competitive pressure to move to the ISO 20022 standard, as the overall shift in the payment industry to instant payments means that their existing products and services could become inoperable if they don't act.

ISO 20022 involves the processing of much larger data volumes compared to conventional legacy formats, so bank systems and databases will need to be capable of processing these larger volumes, and at higher speeds for real-time payments, daily liquidity management, compliance checks, and fraud detection and prevention.

It's essential that there is enough of a time allowance for testing to ensure that all syntax and formatting information is correct, and that the data is mapped correctly within all associated payment and clearing systems. Ideally, testing should be ready too kick off no later than the second quarter of 2022.

It's vital that banks communicate with their corporate clients about the additional data that will potentially become available, and how it will be used. In addition, those clients should be fully informed and included in end-to-end testing.
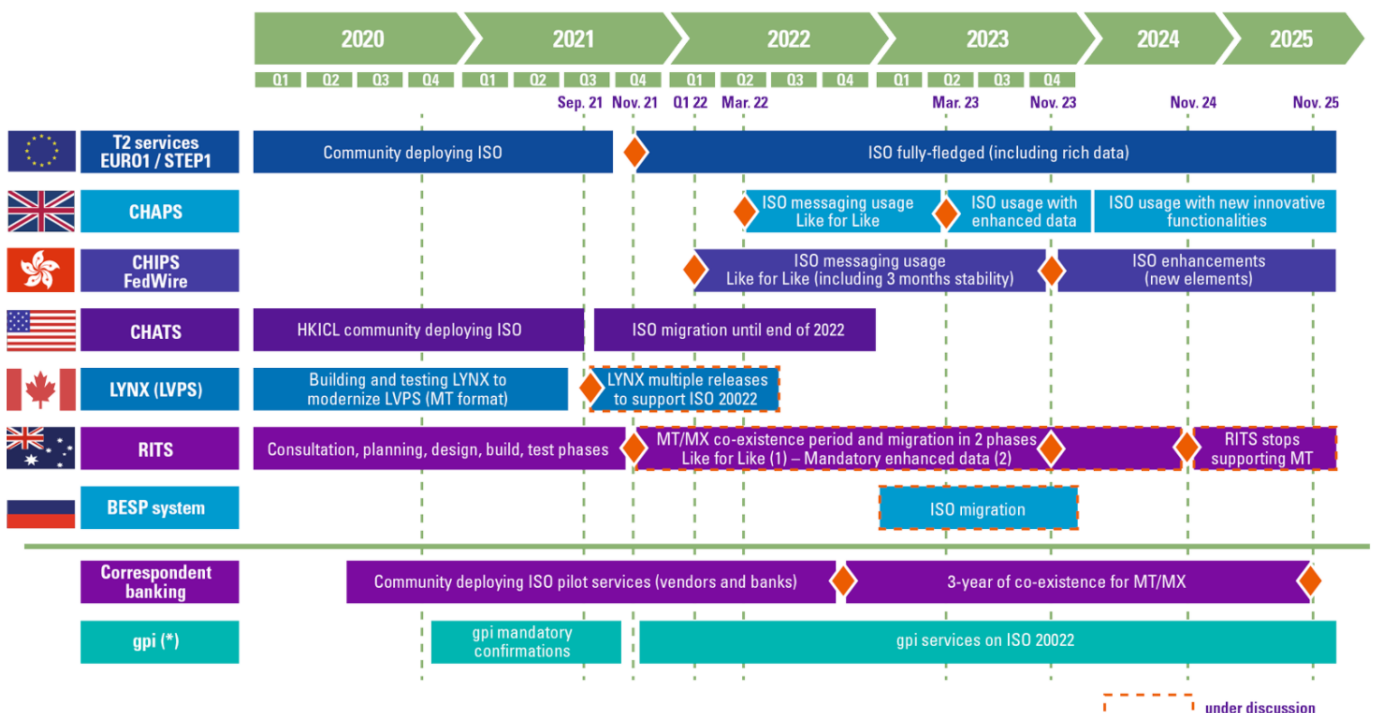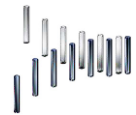
ISO 20022 and cross-border payments

The ISO 20022 standard will change the way banks relay cross-border payments instructions. Some banks are already prepared, while others have a lesser degree of readiness. A break in the chain could mean the potential loss of vital information. The consequences of this are a direct reflection on the bank seen to be the weaker link.

ISO 20022 and High Value Payments (HVPs)

SWIFT, along with major global banks and market infrastructures have formed the HVPS+ market practice task force to create a road map to harmonization for high-value payments and real time gross settlement (RTGS).
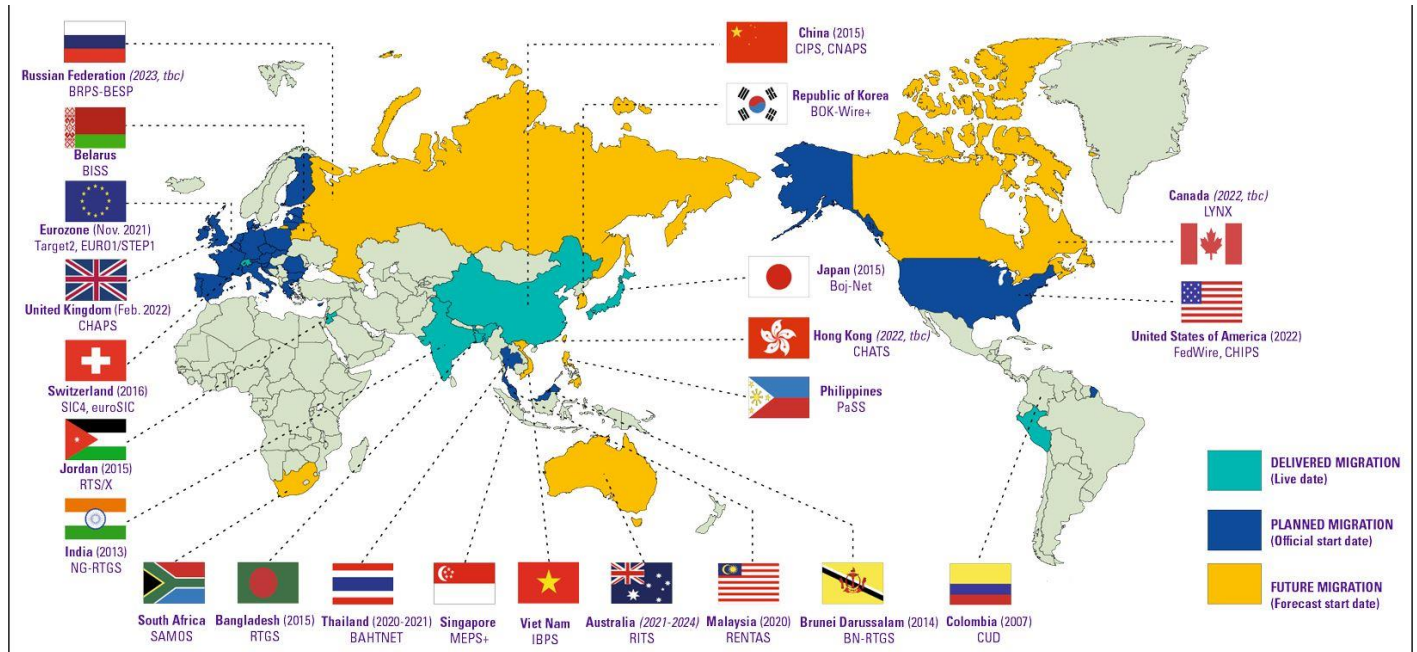
"Harmonizing messaging standards across HPVs will create efficiencies for payment system participants and establish the foundation to develop new services." Michael Knorr, Head of Payments & Liquidity Management, Financial Institutions Group, Wells Fargo Bank

HVP systems play a crucial role in international finance, so monitoring these large value payments systems with the right monitoring and performance management solution is critical. Read more about how RTGS is changing the global financial landscape here.

Key challenges of ISO 20022 implementation

As with any system migration, plans need to balance meeting deadlines, with solidifying a future-proof state. The complexities of ISO 20022, along with interdependencies of implementing new industry standards can create some challenges.

The cost of implementation

Any legacy technology used by payments providers that pre-date ISO 20022 will need to be reviewed, mapped and translated to the new standard. This includes the correct rules for AML, fraud and compliance checks. In addition, outdated legacy systems that can't process or support the ISO 20022 format need to be updated, replaced or converted. This of course, involves budget, which needs to be agreed upon between financial institutions, stakeholders and partners.

Timelines and deadlines

With different markets setting different deadlines for ISO 20022 adoption, payments firms operating across borders need to carefully plan their migration strategy, and the high-stakes complexities that go with it. Many banks are also contending with other transformation projects, so they need to ensure that their migration solutions are solid, not simply 'designed to budget' and providing a poor fit in the long run.

Managing additional information

ISO messages can be hundreds of times longer than standard payments messages. This dramatic expansion of data means that infrastructures will need to be redefined to manage the additional ISO 20022 information. Each and every character within a message has to be 100% aligned with the specifications. The format is validated at several steps along the communication channel chain on the sending and receiving sides. Even a single missing colon could result in a multi-million transfer being rejected or delayed for days.

The importance of real-time payments analytics

A definitive report by Worldpay, on the art and science of global payments shows some interesting payment statistics and insights into world payment trends.

Real-time payments analytics are vital to measure, view growth and make decisions all the way through the payments chain, and across each different platform. This is even more important now with the impending global ISO 20022 migration.

Third-party monitoring solutions

Monitoring with an outboard, or third-party solution is non-intrusive, and integrates seamlessly into the existing enterprise environment, bringing real-time visibility to the entire payments ecosystem.

It collects data from all silos across the payments system, filters, correlates and analyses this information and brings it into a single application.

Keeping on top of emerging technologies, regulatory changes and the introduction of new international payments standards is challenging. With ISO 20022 migration imminent, turning information into intelligence will assure the safe, efficient operation of payments systems worldwide.

There are many YouTube videos which explain the move to ISO 20022 and the benefit from the transformation to this standard.

- https://youtu.be/IGPlu9s_3ro   7 minutes

- https://youtu.be/GzpH84yhWlI   45 minutes