



## Getting Ready for ISO 20022:

What you need to know about the new universal, standard financial industry message scheme

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The financial services industry is always evolving. This is particularly true as enterprises streamline their Global Communications and Messaging infrastructure by adopting a common 'language' and standardized communications format.



ISO 20022 is an international messaging standard defined by the International Standards Organization. It is predominantly used for data exchange between financial institutions. The genesis of the ISO 20022 messaging standard is to provide a common messaging protocol which will have a defined central dictionary and rules. All financial institutions across the globe would migrate from current message standards (e.g., SWIFT MT Financial Messages) to the ISO 20022 standard in a phased manner. SWIFT, of course, is the current, global member-owned provider of secure financial messaging services.

The ISO 20022 standard was introduced in 2004, but it started gaining impetus after a decade due to the obvious benefits that it brings in the era of instant payments and rapid digitalization in the industry.

The entire payment world won't move into ISO 20022 standards at the same time, and they will also follow different approaches, namely 'Big Bang' or 'Like-for-like' migration. In the Big Bang approach, the financial institutions support full ISO 20022 data from the very beginning. A contrary Like-for-like approach would take an intermediate step; only a subset of messages having equivalent data fields in the current data format is considered, limiting its functionalities as additional data requirements are not accommodated.



## Understanding the Transitional Timeline and Methodology



From November 2022 onwards, SWIFT would accept payment messages in the ISO 20022 format (through FINplus or APIs) in addition to the current MT format. The support for MT messages, however, will be discontinued from November 2025 -- after the 'Coexistence Period' -- whereby both old and new message formats would coexist (from November 2022 – October 2025). Target2 and Euro1 would follow a Big Bang approach to migrate the newer payment standards by November 2022. However, payment schemes such as CHAPS – the Clearing House Automated Payment System -- have plans to take a Like-for-like approach first, before migrating to enhanced ISO 20022 messages at a later point in time.

ISO 20022 is a modelling methodology based on the Unified Modelling Language (UML). It captures business transactions and message flows in a syntax independent approach and features a centralized data dictionary of business terminologies across all financial messages and institutions.

## Some of the key components of ISO 20022 are:



**The Data Dictionary** -- which is a repository that contains all the data that can be reused during business process modelling and building a message. Some of its sub-elements include:

- **Business concepts:** It consists of business concepts used in ISO 20022 messages, various parties involved in the business transactions such as financial institutions, end consumers, corporates, agents, etc.
- **Message Concepts:** It consists of actual data in the message, fields in the messages, message constraints, message elements, etc.
- **Data Type:** It defines the data format of the message, valid values of business or message elements

**The Business Process Catalogue** -- has a description of the financial business model, message definitions and message schemas

Business transactions cover various functional areas, for example:

- PAIN – Payments Initiation
- PACS – Payments Clearing and Settlement
- CAMT – Cash Management
- ACMT – Account Management
- CATM – Terminal Management
- SETR – Securities Trade
- SESE -- Securities Settlement

## Why does the international financial services payments industry need ISO 20022 messaging standards?



Some of the key benefits for making this transition include:

- **Enhancing consistency and interoperability** --Globally, financial institutions in different parts of the world currently use various messaging protocols, from proprietary standards to SWIFT MT messages. ISO 20022 has been designed to address issues related to consistency and interoperability, with a defined message structure and forms while exchanging messages with any entity that supports ISO 20022 standards.
- **Enabling richer data & enhanced efficiency** -- ISO 20022 messages are much richer in data, and the ability to accommodate more details helps in the creation of differentiated digital solutions and in efficiency improvement of the existing payment processing systems.
- **Facilitating new age solutions through real time payments** -- Adoption of the ISO 20022 standards in certain parts of the world has accelerated through straight through processing (STP) and with the implementation of real-time payments networks. Request-to-pay, MPS Australia are some of the good examples of new age payment solutions enabled through such networks.
- **Allowing better data quality & analytics** – The ISO 20022 standard ensures better data quality. It improves data analytics capabilities which require less manual intervention, and it also helps in the accurate compliance process.
- **Optimizing costs** -- Current costs of cross border payments and remittance transactions are quite high (6.38% in Q1 2021).<sup>1</sup> ISO 20022-backed payments mechanisms have the potential to bring these costs down drastically. Due to compatible message structures, payments between two countries could be almost instant and significantly inexpensive.

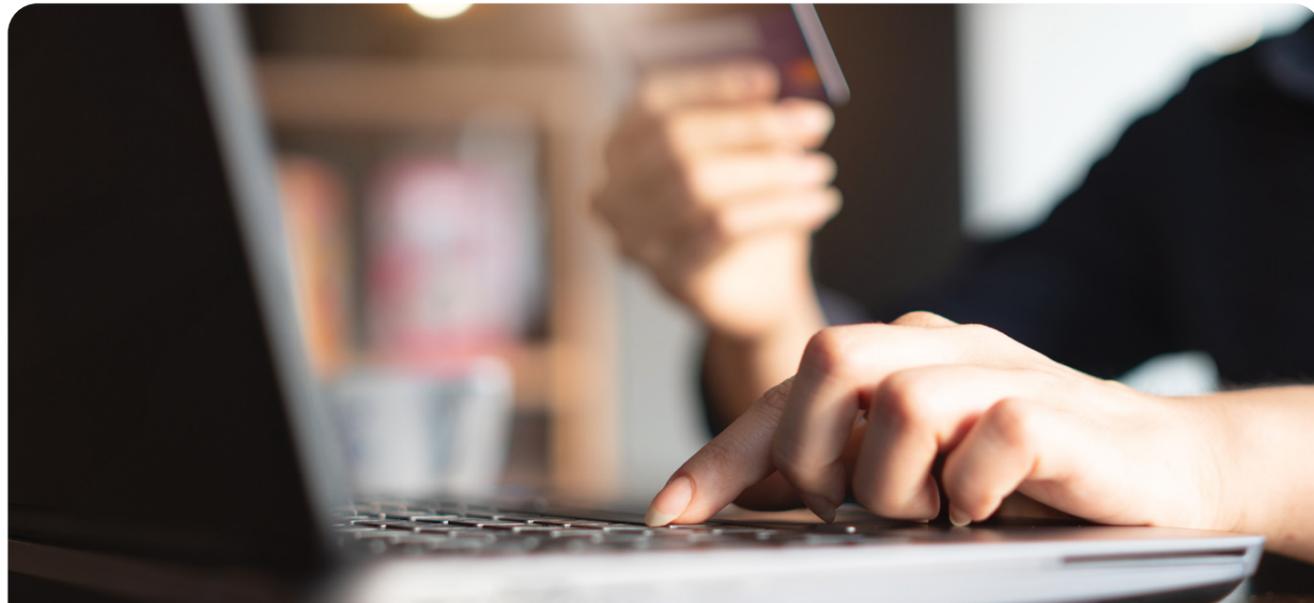
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**and connecting with the larger payment ecosystem.”**

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## Industry preparation for the migration to ISO 20022 should start now

ISO 20022 migration would have a significant impact on the payment industry, and the financial institutions should not postpone their plans to upgrade their systems to send and receive payments in ISO 20022 formats. Early adopters of full ISO 20022 messages would have a clear advantage of being future ready by creating more value for their customers and connecting with the larger payment ecosystem.

As mentioned earlier, different payment schemes across the world could take different approaches to migrate to ISO 20022 standards. The banks and other financial institutions would need to work very closely with the regulatory bodies governing the implementation in specific parts of the world. Nonetheless, banks would need to prepare their systems to accept the ISO 20022 MX messages through SWIFT according to the given timeline. Since the changes are inevitable in the not-so-long-term, those financial institutions should chalk out a complete migration plan to the new standards.

ISO 20022 XML-based or popularly known as MX messages are quite enhanced compared to MT format in terms of message structure, granular details, extended character sets, optional elements, etc. The financial institutions would have to enhance their current payment processors and payment gateways to accept or send the newer messages sets. The transformation process would require careful planning and usage of tools in an efficient manner to help in the translation process. Also, such a large implementation process won't be smooth unless the organizations upskill those who will be involved in the programs. It is important that financial institutions and Industry players train their staffs on ISO 20022 messaging standards, message types, message correction/exception handling, FRM, etc.

### Here are five points that financial institutions should consider in readying for ISO 20022 adoption:

**1. Assess and Define:** Teams involved in the transformation program for banks should be able to assess the current payment ecosystem and payments processing capabilities, and then define a proper plan for data mapping, changes required, storage of data, plan for testing and migration etc.

**2. Ensure robust processes:** Banks need to have robust processes in place to upgrade their legacy infrastructure for processing larger volumes of data, and enable higher throughput, straight through processing, instant payments, systems for liquidity management, compliance check, fraud, and risk management.

**3. Engage in end-to-end testing:** Bank staffs, including the IT teams, should ensure end-to-end testing, reconciliation, clearing and backend updates in associated payment systems are happening properly.

**4. Document broadly:** Documentation of SOPs for all aspects of payments is utmost important for resolving the issues in a timely manner.

**5. Educate & train:** Training employees and corporate customers is an important aspect of migration. Educating corporate customers on additional features, data, additional information to be provided while initiating the payment transaction in online mode or batch mode is vital. End-to-end testing should ideally involve corporate customers as well.

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**The payment industry is on the cusp of major transformation right now because of ISO 20022 migration. Financial institutions would need to look at it as an opportunity to bring more efficiency in their present services and to harmonize with a larger payment ecosystem, as ISO 20022 standards are likely to remove some of the current frictions in payments**

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### All in all, the global Impact and benefits of ISO 20022 adoption will include:

- **Banks and financial institutions globally will migrate** from legacy payment message standards to the highly structured and data-rich ISO 20022 standard. It would not only pave ways for greater integration of payment worlds, but also would foster new innovations to benefit the end customers. The future of payments is expected to be faster, cheaper, and more convenient for retail and corporate customers of banks.
- **Standardization of domestic payments** will help retail payments to migrate to ISO 20022 and real-time payments. Corporates will have better response time for their money transfer through straight through processing.
- **Once Central Bank Digital Currency (CBDC) systems are implemented** in certain countries, then it would be very much possible to integrate them for exchanging payments messages through arrangements like mCBDC or interlinking. This will solve the current issues with cross-border payments that make these transactions quite expensive. Ripple, a leader in Distributed Ledger Technology-based (DLT) cross-border payments, has already adopted ISO 20022 standards; hence, we could possibly see other DLT/Blockchain-based networks follow suit.



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He has more than two decades of IT experience and has led and managed consultancy engagements, and worked closely with product vendors, across Cards, EFT, Fuel Cards, SWIFT messaging, and AML business areas. He has successfully led and implemented payments solutions for multiple banks, financial institutions, third-party processors, and retailers in India and globally. He has spearheaded consultancy projects for various clients in the US, UK, Australia, Malaysia, Bangladesh, Netherlands, and Philippines.

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