



# BAFT ISO 20022 Migration Lessons Learned

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# BAFT ISO 20022 MIGRATION LESSONS LEARNED

## EXECUTIVE SUMMARY

After a long and circuitous journey, ISO 20022 became a reality in March 2023 with the Swift implementation of this payment standard. ISO 20022 stands as a global standard for electronic data interchange in financial transactions. It aims to streamline communication across the financial industry by offering a standardized language for exchanging data.

ISO 20022 represents a significant leap forward in harmonizing financial messaging. Its adoption is reshaping the landscape of financial transactions, providing a common language that fosters interoperability, efficiency, and richer data exchange among financial institutions globally.

The widespread adoption of ISO 20022 poses challenges in terms of technological upgrades, investment, training, and ensuring consistent implementation across different jurisdictions and institutions.

ISO 20022 signifies a pivotal shift in the financial industry, driving standardization, interoperability, and efficiency. Its adoption promises a future where financial communication is clearer, transactions are more seamless, and innovation is accelerated.

To address this, BAFT brought together a group of global transaction banking practitioners to explore the fundamental changes to both messaging and payments processing.

This paper highlights the transformative impact of ISO 20022, its objectives, significance, and the challenges and opportunities it presents to the financial services industry. The paper provides the considerations that are essential for a successful integration of this global financial messaging standard based on the experiences of those financial institutions who have implemented and integrated the ISO 20022 standard in their respective organizations.

While each organization is at different steps and stages of their ISO 20022 planning, implementation, and migration, it is the intent of this paper to provide key components that should be considered during the transition to this new global standard.

The implementation of ISO 20022 represents a significant milestone for the organization, signaling its commitment to modernizing its financial messaging infrastructure. Through meticulous planning, stakeholder collaboration, and a structured approach, it can anticipate a successful transition that will yield substantial benefits for its operations and positioning in the financial industry.

## BACKGROUND

ISO 20022 is the new 'language' of payments that has been adopted by the international payment community, and, is currently being adopted by more and more domestic Financial Market Infrastructures (FMI).

When implemented as a common standard across all FMIs, ISO 20022 garners tremendous benefit for the community to streamline payment processing and data management from an end-to-end (E2E) perspective; i.e. Client-to-Client (C2C). For banks, the ambiguity of data interpretation goes away, augmented by enhanced data, therefore allowing for greater Straight-Through Processing (STP) and reduction of Requests for Information (RFI) for risk management. For End-Users, it provides data in a structured manner with the elimination of truncation and omission of rich remittance information, therefore, providing the ability to automate the AP/AR reconciliation process to speed up the supply chain.

However, the journey to ISO 20022 for the Financial Market Infrastructure, the Bank, or the End-User, is complex, so much so that there have been a number of industry starts-stops-starts; most notable is when Swift had to delay the global implementation of ISO 20022 by one year on behest of the European Banking Community, which in turn delayed the ISO 20022 implementation of several domestic FMIs in other jurisdictions.

## INTRODUCTION

The adoption of ISO 20022 is a highly intricate process with the capacity to impact every facet of the bank, even those not primarily engaged in payment operations. This is attributable to the fact that ISO 20022 serves as a novel 'language' capable of revolutionizing the conventional banking model into one driven by business intelligence through the utilization of interoperable and accessible data.

Consequently, the implementation of ISO 20022 encompasses all the bank's departments and functions, where payments represent only a foundational yet minor component.

This paper serves two purposes:

1. To provide banks that are starting to embark on, or, are moving into the next phase of their ISO 20022 journey, with a set of lessons learned from Banks that have successfully implemented ISO 20022. Typically, these would be banks in jurisdictions where their FMIs have made the decision to implement ISO 20022, or banks that are participants in a FMI that is in a 'coexistence' period where they have decided to implement ISO 20022 as a next phase.
2. To provide FMIs with insights for consideration into the challenges faced by banks when implementing ISO 20022 when the FMIs are building their ISO 20022 go-to-market strategy. This paper will also provide a "what good looks like" view.

This paper will not cover business casing for ISO 20022. It is also not to advocate for banks or FMIs to implement ISO 20022. Most importantly, this paper is not a best practices paper, but more a 'what to look out for' paper.

There is no one best way to implement ISO 20022, as every bank's systems and strategies are different; hence, a comprehensive guide to ISO 20022 implementations is a pipe-dream. As such, this paper will limit lessons learned in five main areas:

- High Level Governance
- Data Strategy/Adoption
- Business Phasing Strategy
- Testing and Validation Strategy
- ISO 20022 Post Implementation and Evolution

This paper assumes that each bank has its own Project and Change Management regime that is tailored for their institutional organizational structure. This assumption will also carry for a bank's Technology and Operations.

This paper has been authored by a collective group of BAFT Member Banks that have successfully implemented ISO 20022 into their organizations primarily due to their participation in Swift. In addition, these banks have either undergone ISO 20022 migration for their domestic FMI participation, or their domestic FMIs have embarked on their ISO 20022 journey, while others have to interoperate between two distinct environments because they are Swift members but their domestic FMIs have not adopted ISO 20022.

## HIGH LEVEL GOVERNANCE

Having a good governance structure is key for any project and crucial for a migration of this nature. While each bank will have its own internal processes, highlighted below are a few considerations spanning across Organization Planning, Communications, Operations, Technology, and External Engagement, that will be covered in this paper.

**Organization Planning:** - It is important that all lines of business within the bank are engaged and committed to this migration, including executive level sponsorship (CIO/Head of Business/Operations) across business and technology and the bank's various lines of business. Banks must ensure that there is a clear definition of program outcomes that could impact customers, compliance, and operations. Agreement is key on items being delivered in different phases, and the same could span across meeting compliance to enhancing customer journeys. It is imperative that clear entry and exit criteria are agreed upon among the respective stakeholders.

**Communication:** Establishing a clear and consistent communication strategy ensures that people across the organization receive the correct level of communication. Internal stakeholders must be kept informed of the progress, and that any emerging risks are clearly articulated to get the level of attention and speedy resolution they need. While there could be minimal changes to customer facing channels, keeping them abreast of the developments is key so that they are aware of any delays that could be a result of problems that other banks could be facing after migration. Any changes required by customers in the instructions they provide to the bank or the information that the banks provide to the customers should be clearly articulated and must follow the minimum notice period as set forth in the bank's agreement with the customers. Depending on the nature of the modification, customers may require additional time to adapt, and this must be factored into the migration plan to prevent potential delays that could result in the bank missing industry compliance deadlines. Banks should prepare for webinars or workshops aimed at engaging customers, ensuring they are well-informed about the migration timeline and the impending changes that might affect them. It is imperative to establish a robust communication strategy for handling incidents, with readily available communication templates to promptly inform both customers and regulators when necessary. Furthermore, it is crucial to maintain effective communication channels with other banks to promptly notify them of any issues and collaborate on solutions, thereby minimizing any adverse effects on customers.

**Technology:** A migration of this nature would require significant technological changes and giving the IT teams adequate time is key for the success of this project.

An E2E architectural review of all systemic components involved in the current settlement of payments and the underlying impacts due to the migration ensures no gaps found at later stages in the project that could add further risk and cost to the program.

Banks have found that establishing a technical standards team helps to analyze standards and map the required changes to fulfil the business demands. Understanding and translating the standards into the technical requirements, impact assessment, to existing flows early in the project will ensure a seamless upgrade.

Where possible, opportunities should be explored to develop solutions using APIs, to assist with future-scaling. Depending on the nature of change, an evaluation must be undertaken by IT on whether a bank should opt to build a solution in-house, or to see if a vendor product best fits the need of the bank. Teams must spend sufficient time in ironing out solutions that are strategic vs. tactical, with clear plans from IT to scale to strategic solutions if a tactical deployment is required to meet regulatory timelines.

As technological solutions are stood up, it is essential that the teams also assess any contingency options, and that these are thoroughly assessed. Testing must also involve a replay of a few days of production traffic over the new infrastructure, providing a chance to rehearse a post-go-live flow.

In preparation for the go-live event, teams must ensure that there is adequate coverage to avoid burnout of individuals who are supporting the migration in the event of any systemic/industry issues. Teams must also work with their business and operations teams to assess the need for various reports that will be required to help them respond to customer inquiries, and, to get a solid understanding of the scale of impact. Because of the specific skill set required for this migration, banks must adequately plan for the backups and contingency due to the high demand of these professionals. With any new technology deployment and a transformation of this scale, having an IT resiliency and recovery plan will ensure that banks are well equipped to overcome any challenges due to different failures. During the go-live event, having a command center that is well represented by technology, operations, client management helps to better orchestrate the implementation and to rapidly respond to events.

**Operations:** Banks must recognize that the adoption of MX (XML Message definition) standards is a significant transition from what is the current “norm”: banks have tailored, enhanced, changed, and essentially, specialized processes and workflows for their own needs over the last 30-40 years; there are no “standards”, per se. A bank that includes its operations team as a part of all major requirements and solutions working groups ensures that new technological solutions touch upon existing flows yet adhere to the new standard.

As with any major migration, this also provides banks with an opportunity to streamline and gain efficiencies by automating certain flows by capitalizing on the new elements that the standards introduce. In preparation to the go-live, all operational team members must undergo extensive training, to familiarize themselves with the new systemic components, and have a solid understanding of where to look when issues arise, thereby, reducing the burden on their IT counterparts.

All operational procedures must be updated to incorporate the new standards and any changed processes must be documented to reflect the newer ways of working. Apart from the systemic components, the teams must also familiarize with the nomenclature and identification of the parties included with the new standards.

All client-facing teams and help desk personnel must also be adequately trained. Banks must also ramp up their operational staff in preparation of any STP breaks due to the newer standards. Depending on the bank’s migration strategy where traffic could transition between old and new workflows, having adequate staffing ensures that there is minimal impact to the bank’s customers. It is key that any issues encountered during the go-live event are logged centrally with clear ownership to ensure they’re effectively tracked to closure. Periodic audits will help ensure that there are no impacts to customers due to the upgrades, and that the program is delivering to the objectives set forth in the charter.

**External engagement:** To ensure a successful migration, it is important to have periodic engagement with other banks in the industry, discussing usual challenges, readiness of other banks, etc., which will provide the necessary insights for the program and, where necessary, the ability to correct course. Also, reaching out to other banks for testing over and above what the scheme mandates, especially the banks with high volume activity, ensures viability of the migration. Active participation in industry bodies related to compliance, and collaboration with peers, etc., will help banks get the required feedback and assist to prioritize the development activity internally.

## DATA STRATEGY / ADOPTION

ISO 20022 can be considered a completely new language for international financial messaging, and very different from the MT format or ISO 15022 that is still widely used, and that has been the standard up until now.

And when learning a new language, there is a need to familiarize first with the main characteristics of this new language and the capabilities or possibilities that this offers.

In this sense, the ISO 20022 standard offers a structured format and a new data model with additional data elements that can be very beneficial for business and payment screening analytics. Beginning any migration initiative with an in-depth analysis of this new structure is complex, and these new data items will help to understand the opportunities the new standard offers and to identify enriched data capabilities.

Once this new language is understood, a logical next step is to classify the new enriched data capabilities into those that will benefit the bank's clients (narration, structured data, first-time right, etc.) and those that will benefit the bank's internal functions (improved STP, better analytics, enhanced screening possibilities, etc.).

One final recommended step in the planning process is to focus on industry compliance prior to the commercialization of new features. Organizations that were able to decouple these changes found that this was a useful technique to rationalize efforts and to isolate the industry migration-related issues (if any).

All previous lessons learned refer to the planning stages of the migration. When moving into the design and execution phase, organizations that have already migrated to ISO 20022 conceded that it was critical to be able to understand data requirements and break them down into data models that were designed in the most granular way possible.

It is important to be able to support structured data requirements, which is one of the key requirements when migrating to a full ISO 20022 format. Most organizations found in the migration process that the level of granularity required under the structured format is not usually available in most legacy applications and customer databases, so this is one of the key aspects to consider when planning an ISO adoption.

In fact, international payment institutions such as the PMPG (Payments Market Practice Group) have issued practice guidelines highlighting the importance of good data quality (defined as structured, complete and accurate data) and hint at the fact that this should be provided at the source/origination of a payment transaction, encouraging to initiate a project to review and improve the data on file for clients (read PMPG whitepaper on [Structured ordering and beneficiary customer data in payments](#)).

Some additional key aspects to consider:

- The impact on how party(ies) information is stored and leveraged in a structured manner.
- The impact of the coexistence between the two formats (MT/MX) on data models.
- Additional efforts that may be needed to repopulate client data info as a one-time exercise.
- The impact of higher data-size/storage requirements derived from the extended ISO 20022 standard.

Also, the data models should be designed in a way that can support current and future data needs; that is, the full ISO 20022 format is very rich and organizations may want to progressively evolve in the full use of the data in scope but may not want to change data models continuously in the process, so the design should be holistic enough to accommodate this future evolution.

All the above points refer to the general process for ISO 20022 adoption and migration, but it must also be taken into account that, while ISO 20022 is the general language for international financial messaging, different FMIs are adopting ISO 20022 in different ways, creating restricted versions of the standard and shaping them into specific industry flavors. This is the case for FMIs like CHIPS and FedWire, that have their own version of ISO 20022.

This situation is particularly relevant for financial entities that are members of these FMIs and exchange financial messaging through Swift, as they will need to be aware of the different industry standards and peculiarities involved.

Also, when operating between systems with different flavors or standards, financial institutions will need to consider the following:

- They will need to be able to classify data properly and have proper translation or data formatting engines to be able to interoperate between all systems.
- Some data truncation may occur (e.g., this may be the case when the first leg of an ISO 20022-initiated payment is processed via a FMI and forwarded by the first agent after the FMI via MT). The PMPG whitepaper on [ISO 20022 Migration and Interoperability Considerations](#) may be useful to understand the possible scenarios for data truncation and learn how to mitigate these.

This reinforces the need for a centralized data model that is application or system agnostic and that can feed all messaging systems independently of the specific messaging standard it needs to use. The functions of Data Governance and Data Management become critical to govern the definition and evolution of these data models and the future use of the data.

One final reflection is that all previous difficulties could be minimized if FMIs would tend to adopt the ISO 20022 global standard as a base (CBPR+/HVPS+) rather than elaborating on specific flavors or versions.

## BUSINESS PHASING STRATEGY

When embarking on such a challenging journey, it is important early on to assess existing correspondent and FMI relationships and to define a clear roll out strategy. Where Direct Participants have to comply with FMI mandates, Indirect Participants only need to ensure they are passing CBPR+ messages that allow the Direct Participant to comply with these FMI mandates. Failure to comply with these rules could result in increased charges & slower STP, and in a worst-case scenario, the FMI could simply not allow the traffic.

With the introduction of richer information in the payment chain, all financial institutions need to grapple with new compliance challenges. These include the travel rule (US) or Foreign Trade Regulation (FTR) article 10 (EMEA) but also structured postal address and remittance information. Delays in complying with these rules or the usage of translation tools will require internal compliance or audit waivers, as well as robust remediation plans to address data truncation gaps.

Banks have multiple options when it comes to processing rich data:

- *Core Payment System Replacement (a program in itself):* those with Legacy Vendor Payment systems where Operations teams have embedded additional workflows/logic will need to consider how this can be translated or replaced by the updated Vendor application – this will require significant effort and most banks have not done this. Those banks that were able to take advantage of a Vendor upgrade to an ISO compliant Payment system could have an advantage in the utilization of enhanced data.
- *Legacy Systems with an ISO wrapper:* mapping of data can take place to allow ease of processing, while the ISO data needs to be accessible for use as required (i.e., to pass structured postal address data elements to sanctions screening).

It is important to understand and expect that this is a multi-year effort (beyond 2025), as new message types (charges, investigation, cheques, etc.) are enabled by Swift and the transition to camt, statements, and advices pick up speed, along with the adoption of enhanced data.

Senior Executives should be kept aware of the roadmap for ISO 20022 adoption. There is a balancing act to secure investment for other payments changes, while also funding the ISO 20022 requirements.

Once the overall roll out is complete and internal compliance and core payment processing strategies are defined, it is important to set key success criteria, i.e., receiving, forwarding, or being able to initiate and leverage enhanced data.

- **Receiving** – For the March 2023 CBPR+ go-live, all banks were registered for FINPlus, but not necessarily ready to receive. Banks not able to receive faced significant issues and had to work with each partner bank to ensure they could keep processing wires. This level of effort was not sustainable and created unnecessary delays in the ISO 20022 adoption. While inflow translation could still be supported, as enhanced data started to flow there were issues with truncation/dropped data. With the introduction of Transaction Manager (TM) in May 2023, some institutions that could only receive MT, and could no longer guarantee that they would, had to



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adapt their receiving operating model to process the embedded-MT, in the event that they receive a multi-leg correspondent banking payment instruction, as TM always reverts back to MX any instruction was initiated as MX.

- **Forwarding** – Most institutions were in a position to forward ISO when receiving ISO, and MT when receiving MT. Though this short-term strategy allowed banks to go live in March 2023, it did not necessarily allow them to validate their own ISO 20022 capabilities. With SWIFT providing data restoration capabilities and increasing data integrity rules via its TM, the safe option for the March 2023 deadline was to send out what was received. However, this just pushed the migration to MX further down the road. Given the large volume of change still to come with ISO 20022 and the target of Nov 2025 to end coexistence, the workload will be significant.
- **Initiating** – Due to the various options available for the March 2023 go-live (i.e., only a few banks initiated ISO 20022 messages), SWIFT ISO 20022 traffic is still relatively low. Banks that are now beginning to send more ISO 20022 messages may face challenges when the SWIFT TM bypass and abort functionalities on specific data integrity rules are progressively activated (Duplicate UETR, E2E ID, etc.). In other words, the earlier a bank is able to initiate ISO20022 messages, the earlier they can fix potential issues and avoid disruption in their payment traffic. Sending payments in complete MX also allowed banks to gain the benefits of testing production volumes of traffic through TM without any 'hard' aborts. Banks that turned on production volumes post October 2023 when TM was fully enabled, ran the risk of experiencing a large volume of aborts, and this caused issues with payment processing as the payment was marked as complete. Full MX from Day 1 has also allowed operations teams to adapt their processing and gain familiarity with the new MX message formats.
- **Leveraging enhanced data** – A key area for adoption is alignment of industry standards – CPML & HVPS+ have produced a recent paper, and this global level of alignment needs to continue to enable the successful introduction of enhanced data elements in a controlled manner. The priority of adoption is likely to be driven by mandatory requirements published by clearing houses (The Bank of England is currently the only FMI that has published requirements for 2025/2026). Every institution should be investing the time in contributing to industry surveys on this topic, so all voices are heard.

## TESTING AND VALIDATION STRATEGY

Attention to the E2E view of international payments is essential:

- **Testing and Validation Strategies**

### Test Preparation

- Internal/external stakeholders communication and collaboration are key when attempting to streamline knowledge-sharing, with regards to the overall testing plan, full suite of applications in scope, and E2E testing scenarios that need to be executed.
- For weekend testing, advance planning is essential to limit potential conflicts with any internal maintenance or other system upgrades planned during the same period. Also, all necessary provisions should be made for any planned system down-time and compulsory Swift weekend maintenance windows.
- For testing lower IT environments, some FMIs allow for the use of Test BICs and non-standard Level 4/5 Distinguished Names. It is important that this specific requirement is supported by the core payment applications in the scope of the testing.
- It is also suggested to test some scenarios that complement the High Value Payments flows for FMI testing. For example, pacs.004 return is to be tested for High Value Payments flow (as per the FMI guidelines) but camt.056 for requesting the return of previously settled payment is tested using CBPR+ flow.

### Testing approach

- *Comprehensive:* In order to ensure complete coverage of the payment scenarios, it is recommended to use the OATS methodology (Orthogonal Array Testing). Tests include all client configurations, messages, flows, currencies, etc., and associated scenarios using a manageable set of test data. In addition to OATS, it is suggested that the test cases be automated in sprint and structured as E2E (e.g., from inbound message to outbound), so all integration issues across all systems can be validated alongside the target functional changes. This approach is applicable for functional, system integration, and user acceptance testing.
- *Accuracy:* Due to the scale of customizations for clients and flows, the team was experiencing multiple "false fails" when validating existing payment functionality with new message formats. To address, it is recommended to use an intelligent engine approach where the expected results for the specific flow and data are adapted based on behavior of that data flow in current production.



- *Resiliency*: Build resilience through continuous E2E validation of newly introduced ISO functionality by building in production replay and using autonomous testing approaches. Any flow introduced to the environment through a production refresh, a manual test, or research scenario by business analysts should automatically go through the full set of validations at each hop and every single day.
- *Client testing* – Swift MyStandards: Banks that hold a license with Swift can share their specifications with their clients through the Swift MyStandards platform and also have access to dedicated Readiness Portals, which allows users with a status for their testing and clear textual reason for invalid tests. This approach streamlines the bilateral testing through Swift, as clients are requested to first validate self-produced samples on the MyStandards Readiness Portal for pacs.008/pacs.009 messages. Clients are able to take corrective actions at a very early stage. This prerequisite to testing significantly limits the number of issues and investigations in the bilateral E2E phase.

## ▪ Lessons from End-to-End (E2E) Test phases

- Ensure the scope of the testing includes a real representation of production use cases. Those areas where a functional scope was not included inevitably experienced problems during the next phases.
  - ✓ Testing cash management and correspondent banking cases and use specific flows with cover messages (pacs.009 cov/pacs.008).
  - ✓ Take real-life transactions for representative data, and examine the cases which create issues and are already known by the industry.
  - ✓ Include “happy” and “unhappy” flows in testing to get a complete picture.
- Include other banks to test the real-life situations where multiple banks intervene, and payments enter and exit the bank for the same transaction.
  - ✓ Test with variety of bank types and scenarios.
  - ✓ Start testing early to identify problem areas that need community involvement and agreement.
- Include real users in the test, particularly the back-office teams which need to intervene for “unhappy” flows.
  - ✓ An example would be using the new screen or the new format fields, with which the teams are not familiar.

- Ensure the testing of satellite applications intervening in the processing are included.
  - ✓ For example, include all detection and rules-based applications intervening for sanctions, fraud, anti-money laundering. As the new message changes, it needs to be accepted with real data by these dependent applications.
  - ✓ Client and regulatory reporting are also key to test in this context.
- As some banks may interpret the scheme differently, there is a risk that new possibilities of using a richer format and new fields syntax rules will lead to extreme scenarios where new data or formatting elements may create real issues, not only internally but in data received from other banks. Examples:
  - ✓ Leading and ending spaces introduced in a field in the chain are not accepted by the clearing (EUR RTGS), and,
  - ✓ Leading zeros in amount fields are accepted in new format but not accepted by other banks (EUR RTGS).
- **Lessons Learned from Dress Rehearsal**
  - Dress Rehearsals and Penny Tests (i.e., real production transactions) in preparation of go-live are critical to avoid surprises. Two different approaches have been observed: one on the side of BOE and another at BCE.
    - ✓ For a full migration of a FMI (like EUR or GBP RTGS), it is key to have a window of time for a Dress Rehearsal in production during the weekend. Penny tests should be processed between banks. It may be advisable to also include small commercial payments which require the validation from the FMI and other banks willing to participate.
    - ✓ Dress Rehearsal windows need to be planned in advance at different periods ahead of the go-live. Example (BOE): 1 month, 2 weeks, and the last weekend before go-live.
    - ✓ There should be more than one Dress Rehearsal exercise so that banks are able to replay payments, and in case of a defect, ensure that the first-time production situation is activated and executed.
    - ✓ Since not all bank systems are compatible with weekend payment processing, Dress Rehearsals should be anticipated for impact analysis to play penny tests in a production-like situation.
    - ✓ The perimeter of the Dress Rehearsal weekends should be flexible enough to run a scope of payments that are representative of real production cases (Correspondent Banking cases, Cover Method, etc.).

- For Correspondent Banking Providers:
  - ✓ Alternative scenarios that should be tested in this space are cancellation of payments, return of funds, notifications to receive, and cancellation thereof. As banks embark on testing with clients and correspondents, they need to ensure that the relationship management application (RMA) to exchange ISO MX messages are refreshed in the test environment with the Swift Gateway. This will ensure the delivery of the test messages.
  - ✓ Depending on the bank's ability, they may either offer bilateral testing with their clients or create windows for community testing where multiple clients/correspondent banks can test at the same time. This leads to an efficient utilization of resources.
- Dress-Rehearsal strategies
  - ✓ Banks should allow for at least two dress rehearsals in the production environment – for demonstrating full operations readiness and preparing all core applications linked to the E2E flows to be thoroughly tested. An ECB strategy that allowed for penny tests only during the migration weekend presented a higher risk than BOE strategy to have several Dress Rehearsal weekends upfront.
  - ✓ Partnerships between banks on Dress Rehearsals will enable banks to secure E2E processing.
  - ✓ For CBPR+ where there was more flexibility with coexistence period, the early adopter phase upfront on March 23, 2023 go-live allowed banks to penny test, which was essential.
  - ✓ It is still recommended to penny test upfront any activation which is possible all the time with Swift coexistence.
- **Lessons Learned on Financial Market Infrastructures (FMIs)**
  - The key is to be familiar with all payment flows supported by the FMIs i.e., Application to Application, User to Application (via Web access) and Contingency flows.
  - Plan on an early start for go-live testing. On the day of go-live for a full FMI activation in ISO, aim for an early start, allowing banks to exchange messages, including penny tests and first real client payments. This allows for a manageable and progressive ramp up to the banks' systems. It also allows for the control of payment traffic, and, if need be, to stop traffic and fix issues without creating a back-log of transactions to repair (as no other payments would be occurring at that time). This strategy secures the start of day when the most critical payments can be processed early morning, and also, to avoid COT extension if an incident occurs during the day.

## ISO 2022 POST IMPLEMENTATION AND EVOLUTION

The ISO Migration is comprised of 3 phases:

<b>Phase 1</b>	Mar. 2023	Start of Coexistence
<b>Phase 2</b>	Mar. 2023 to Nov. 2025	Migrate to MX across MT1,2,9 messages categories (Enhanced TM capabilities)
<b>Phase 3</b>	Nov. 2023 & forward	The Enhanced Phase (Adoption of Enhanced and Structured data)

### Phase 1 – Start of Coexistence:

This phase is already live: All banks in the cross-border space expected to be able to receive and process MX.

### Phase 2 – Migrate to MX across MT 1, 2, and 9 message categories:

- The adoption of MX messages in the cross-border space has not been in line with the expectations.
- Banks need to have plans to complete send and receipt of MX messages before Nov. 2025. Enough time should be allotted before Nov. 2025 and the completion of the migration, so that any issues can be resolved during the coexistence phase.
- Many banks initially have implemented translation-based solutions to meet the timelines, but they should create plans to migrate to ISO 2022 native solutions, as this is where they will be able to simplify the complexity within the banks and reap the benefits of interoperability across the payments landscape.
- The obvious focus has been on payment messages, but the adoption of statement and advice (camt) messages also need to be progressed. These are the messages which have most of the customization today.
- Banks need to migrate to new camt messages for investigations and queries.
- Domestic Markets across the globe should also have clear plans to migrate to ISO 2022 to avoid loss of data (or have guidelines in place if they are not able to migrate before Nov. 2025).

### Phase 3 – The Enhanced Phase (Adoption of Enhanced and Structure data):

- Banks need to work with their corporate clients to increase the adoption of ISO 20022 to be able to send and receive enhanced and structured data.
- Corporates will also have to go through upgrades and migrations on their side, and these can also be extensive and expensive changes for them.
- Corporates and/or the end clients are going to be the originators of the enhanced data, so it becomes important to engage them early on.

## CONCLUSION

ISO 20022 is one of the most important payments system developments at the present time. The ongoing evolution of ISO 20022 will bring significant benefit to the ultimate users in terms of information and to the processors in terms of structured data, thereby empowering them with the potential for process automation.

The journey to implement ISO 20022 is long, arduous, and potentially fraught with obstacles, both internal and external. As mentioned, ISO 20022 is still evolving, therefore when what seems to be the completion of implementation, there will seem to be perpetual updates that require investment and resources.

The consequences of not embarking on the ISO 20022 journey for any one institution would be detrimental to that institution especially since their primary payment network providers are migrating to ISO 20022 on a mandatory basis. Some institutions may opt to use their existing data structures and simply translate to/from ISO 20022 for final processing therefore truncating rich data; this would eventually be detrimental to their business because the end-client would be underserved and move their business away to an institution that can meet their greater needs.

The lessons learned outlined in this paper are a consolidation of the major trials and tribulations of the banks that have embarked on their ISO 20022 journey. It is hoped that others who are just beginning their ISO 20022 journey would benefit from these to navigate around potential barriers for a smoother ISO 20022 implementation.



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