



ISO Implementation Strategy

An Update from the FED and TCH

2 December 2019



ISO 20022 Programme

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What is ISO 20022?



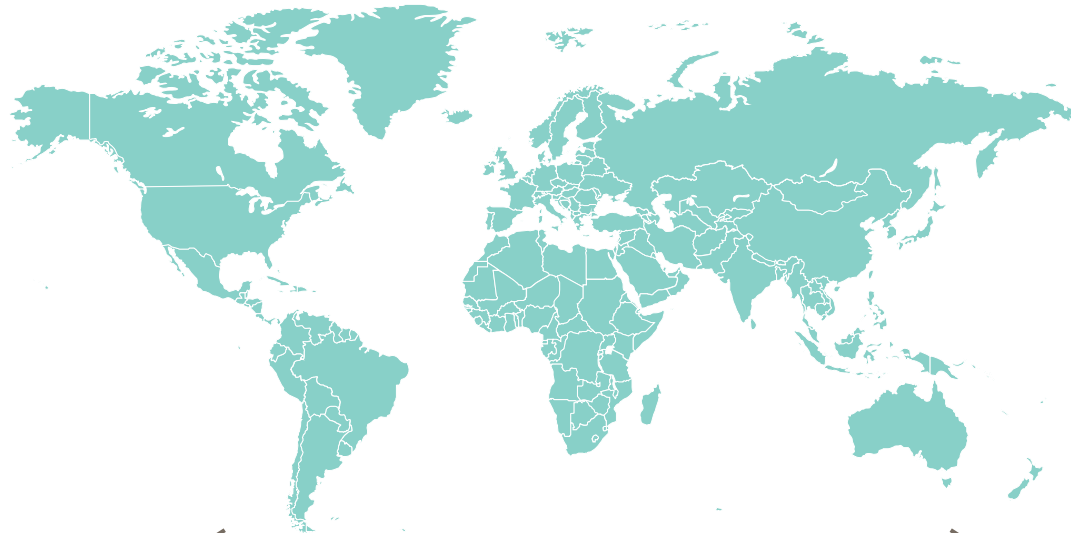
A global shift to ISO 20022

A rush to ISO 20022

ISO 20022 has been adopted by market infrastructures in 70+ countries replacing domestic or legacy formats

Delivering next gen payments

ISO 20022 is the key standard in next gen payment schemes, including instant payments, move to 24x7, supporting open banking over APIs, and others



Global domination

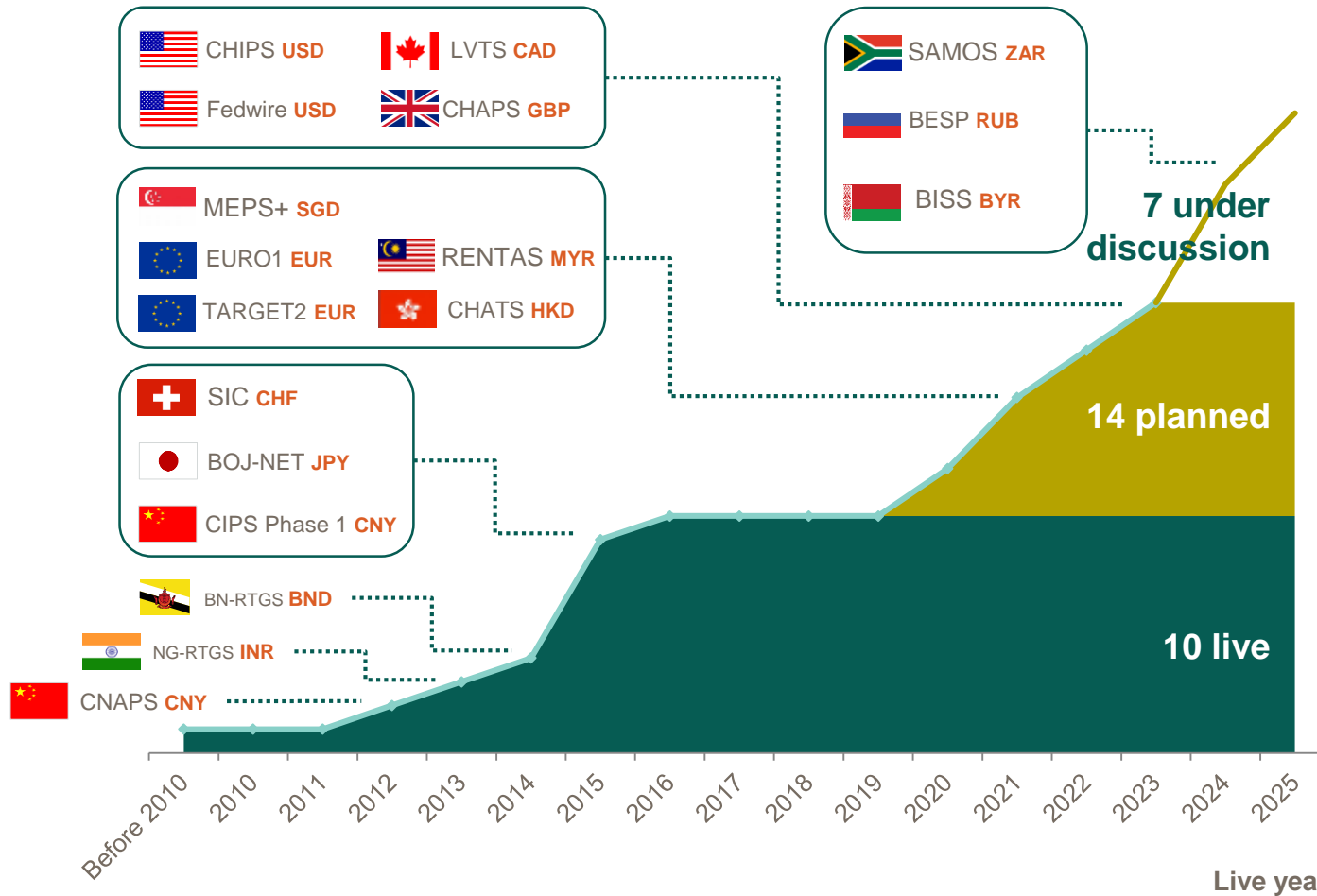
In the next 5 years, ISO 20022 will dominate high-value payments, supporting over 80% of transactions values worldwide

Growing impact

This shift is already impacting the cross-border payment system; under the Eurosystem 'big bang' move to ISO 20022



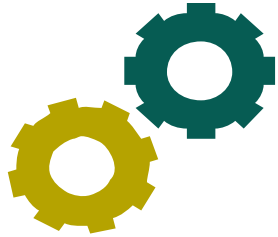
80% of global high value payments volumes will adopt ISO 20022 by 2025



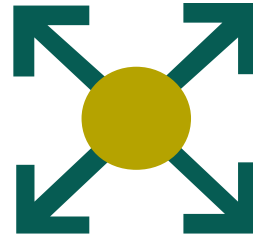
All reserve currencies are either live or have declared a live date: USD, EUR, JPY, GBP, CNY, CHF



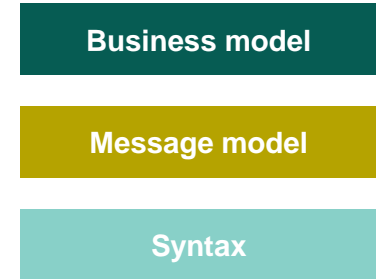
ISO 2022: A recipe for making financial messaging standards



A methodology to develop common financial messaging standards, **based on a business dictionary**



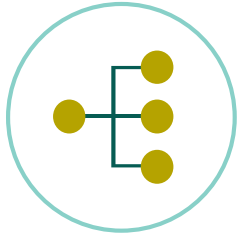
An open, neutral and global standard, **freely implementable** by anyone and supported by an **open governance process**



Syntax independent business model, commonly implemented in XML and may be represented in any other future format including JSON for APIs

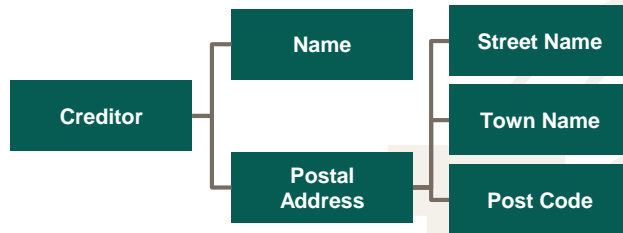


What improvements does ISO 2022 bring over MT?



Element hierarchy

- Nested elements for logical grouping of data
- For example **Creditor** comprises of:



Dedicated elements

- For example
 - Dedicated **End-to-end Identification** customer reference from Debtor to Creditor
 - **Settlement Account** is a dedicated element rather than relying on cross-field validation, and includes granular sub-elements including **Currency** of account
 - **Service Level Code** or **Proprietary** description repeated 3 times to capture specific service expectations
 - **Charge information** includes sub-element to capture the Agent that takes charges or is due charges
 - Mandatory **Debtor Agent** and **Creditor Agent** are static roles which clearly identify who services the customer



Enhanced data model

- Extensible financial language that accommodates local practices and their variants
- For example
 - Accounts identified by sub-elements such as **IBAN** or **Other**
 - Codes identified as **Proprietary** or as an ISO recognized **Code**, which may be defined externally to the message
 - Agents and party identification includes **LEI** and more granular **Postal Address**



New elements

- Enabling On Behalf Of (OBO) payments for example using **Initiating Party** field to capture details of party initiating credit transfer on behalf of **Debtor**
- Structured **Remittance Information** can include rich invoice information to support reconciliation for the **Creditor**
- Dedicated instruction elements allow instructions for specific parties, such as **Instruction for Creditor Agent** and **Instruction for Next Agent**



Where can I get more help?

New resources are available



Webinars & work sessions

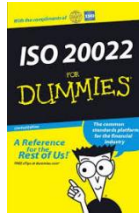
New [webinars & information sessions](#) are available for you to register and get your questions answered



ISO 2022 Programme hub

The ISO 2022 Programme [Document Centre](#) now includes:

- (Updated) ISO 2022 for Dummies e-book
- (New) Third party toolkit & FAQ
- (New) ISO 2022 for payments webinar



Adoption services

Get support for your project with:

- Training
- Impact assessment
- Standards mapping
- Translation & integration solutions

SWIFTSmart

The [SWIFTSmart](#) e-learning platform includes training modules for

- Introduction to ISO 2022
- Introduction to MX
- (New) ISO 2022 Adoption for CBPR+

MyStandards

The MyStandards [CBPR+ group page](#) includes:

- (New) camt.053 / 052– Statement & Report
- (New) camt.054 / 057 – Notifications
- (New) camt.056 – Cancellation
- (New) camt.060 – Account Reporting

Knowledge Centre

New [Frequently Asked Questions \(FAQ\)](#) is available in the Knowledge Centre

Vendor support

A Vendor Readiness Portal is live, allowing vendors to test their applications

A self-attestation framework has been launched to allow vendors to confirm readiness for CBPR+

List of attested vendors will be published on [swift.com](#) starting March 2019

Customer support

[SWIFT Customer Support](#) is available to answer questions if you do not find the information you are looking for





Fedwire[®] Funds Service & CHIPS[®] ISO 20022 Migration Strategy Update

Frank Van Driessche, AVP, Federal Reserve Bank of New York

Jim McDade, SVP, Product Management & Strategy, The Clearing House

Agenda

- Original three-phased ISO 20022 migration strategy
- Payments Market Practices Group request to revisit the strategy
 - What is the request?
 - Why now?
- Current status of Fedwire & CHIPS ISO 20022 implementations
- Possible new ISO 20022 migration strategy & risk reduction strategies
- Next steps

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“CHIPS” is a registered service mark of The Clearing House Payments Company, L.L.C.

Original phased ISO 2022 migration strategy

Phase	Description
Phase 1 ISO Preparation (November 23, 2020)	<ul style="list-style-type: none"> ■ Clean up the legacy format to prepare for and simplify the ISO 2022 implementation. ■ Align to the November 2020 SWIFT MT changes to originator and beneficiary fields.
Phase 2 ISO Like for Like (Q1 2022 to Q3 2023)	<ul style="list-style-type: none"> ■ Migrate participants in waves over 12 to 18 months to send and receive ISO 2022 messages that have fields and character lengths that are comparable to the legacy format. ■ Translate the legacy format to ISO 2022 and vice versa when necessary to accommodate senders and receivers that are not using the same format. ■ Sunset the legacy format at end of this phase.
Phase 3 ISO Enhancements (Q4 2023)	<ul style="list-style-type: none"> ■ Enable all participants to send ISO 2022 messages with optional enhancements.

PMPG Request – What is it?

- On September 16, 2019, the Federal Reserve Banks received a formal request from the Payments Market Practices Group (PMPG) for high-value market infrastructure operators to:
 1. Align to a common set of fully-enhanced ISO 20022 messages to ensure cross-border interoperability.
 - Applies to Canada, Europe, UK, US
 2. Revisit ISO 20022 migration strategies that include a phased approach in favor of a big-bang implementation to fully-enhanced ISO 20022 messages as soon as possible following November 2021 to shorten the risk and duration for cross-border interoperability issues.
 - Applies to Canada, UK, US
- The PMPG sent the request to other market infrastructure operators, including The Clearing House Payments Company L.L.C., the Bank of England, the European Central Bank, and EBA Clearing
 - Note: The request is also applicable to Payments Canada

PMPG Request – Why now?

- Global banks were previously supportive of a phased ISO 20022 migration approach in the U.S. and the U.K., but the ISO 20022 implementations for SWIFT and the European high-value payment system operators, which begin in November 2021, have caused them to question the value of a phased approach.
- Specifically, in November 2021:
 - SWIFT participants will need to be capable of **receiving** fully-enhanced ISO 20022 messages over the SWIFT network.¹
 - Banks that participate in the European high-value systems (i.e., TARGET2 and EURO1) will migrate to **sending and receiving** fully-enhanced ISO 20022 messages in a big-bang implementation.
- Insights from global banks:
 - Once they make the investments to enable fully-enhanced ISO 20022 messages in November 2021, it would be inefficient for them to scale back their systems to support phased implementation approaches in other markets that are planned to occur after November 2021.
 - Once they start sending fully-enhanced ISO 20022 messages in Europe, there is a risk of data truncation for cross-border payments sent from Europe to receivers in other jurisdictions.
 - They would prefer to implement fully-enhanced ISO 20022 messages in a common way for all the major currency zones within a short timeframe to minimize the risk and duration of cross-border interoperability issues.

¹SWIFT participants will have until November 2025 to migrate to **sending** fully enhanced ISO 20022 messages over SWIFT.

Current Status of Fedwire & CHIPS ISO 2022 Implementation

- On September 23, 2019, both the Federal Reserve Banks and The Clearing House announced that they would:
 - Pause their respective ISO 2022 migrations to assess the PMPG request.
 - Not implement Phase 1 of their respective ISO 2022 implementations in November 2020 as originally planned.
 - This means Fedwire & CHIPS will not implement changes to accommodate the SWIFT 2020 standards release (i.e., the changes to 50F/59F to require line code 3/ for the country code and to limit the use of line codes 1/, 2/, and 3/ to 2 occurrences).
- See Fed press release: <https://www.frbservices.org/news/press-releases/092319-fedwire-funds-migration-iso2022-messages.html>
- TCH issued an Operations Bulletin to all CHIPS participants.

New Strategy Considerations

- The Fed & TCH have been discussing possible new ISO 20022 implementation approaches with their internal technical teams.
- A “big bang” implementation approach to fully enhanced ISO 20022 messages would be easier from a software development and internal testing perspective.
- HOWEVER, there are concerns about the risks associated with everyone having to be ready to go live on the same date.
- Any “big bang” implementation approach would need to include significant risk reduction strategies.
- If a new implementation strategy is selected, the Fed would need to go back out for formal public comment (probably 60 days) through the *Federal Register* process.
- Thus, it is unlikely that a final decision would be made on a new strategy before Q2 2020.

Possible ISO 20022 Migration Strategy

For discussion purposes only

- Eliminate ISO Phase 1 (ISO Preparation) & ISO Phase 2 (ISO like for like).
- Add **new ISO Phase 1 release** (ISO interoperability) in November 2021 to provide a “container” in the existing Fedwire & CHIPS proprietary formats to carry excess data from customer transfer and bank transfer messages originated outside of the U.S.
 - Details around the exact solution is pending PMPG recommendation regarding an approach for how banks & market infrastructure operators should handle excess data.
- Implement original ISO Phase 3 (i.e., fully enhanced ISO 20022 messages that align to the HVPS+ guidelines) in a “big bang” approach.
 - Realistically, this would not happen earlier than **November 2023**, which was the original target date for Phase 3.

Possible Risk Reduction Strategies

For discussion purposes only

- A number of risk reduction strategies would be required to support a big bang

	Feature	Fedwire Funds Service	CHIPS
1	Align to the latest HVPS+ guidelines	Yes	Yes
2	Robust customer communication & education strategy	Leverage SWIFT ISO 20022 general education training materials and engage Fed marketing & sales team to ensure customer awareness & to encourage participation in educational webinars & in person workshops	Yes
3	MyStandards Readiness Portal to allow customers/vendors to test their ISO 20022 schemas against the Fedwire/CHIPS usage guidelines well in advance of implementation date	Yes	Yes
4	Robust testing environments	Introduce second customer testing and pre-production testing environments to support dedicated internal and customer testing for new ISO 20022 messages	Expand current customer testing capabilities
5	Rigorous customer/vendor testing & attestation requirements	Mandatory customer/vendor testing in both the customer and pre-production testing environments prior to go live.	Yes

Possible Risk Reduction Strategies

For discussion purposes only

	Feature	Fedwire Funds Service	CHIPS
6	Mandatory backup requirements (Fedwire only)	<ul style="list-style-type: none">▪ FedLine Direct customers that have their own connection will need to establish a backup FedLine Advantage connection using a separate VPN.▪ The Fed is also considering requirements related to the FedPayments Manager import/export feature for high-volume customers.	N/A
7	Mandatory reporting requirements	Certain customers will need to report their progress on key milestones to their Federal Reserve Supervisor.	TCH Risk Department is assessing possible strategies.

Next Steps

- The Fed & TCH will continue internal discussions regarding possible migration & risk reduction strategies.
- The Fed & TCH will provide an update to Fedwire and CHIPS customers and software vendors via a WebEx when one is available (Q2 2020).



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