



ISO 20022 Basics:

What Do I Need to Know?

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Topics

- Background
- High-Value Work Stream
- Low-Value Work Stream



ISO 20022 is a harmonized set of extensible markup language (XML) financial messaging standards across major financial services domain

Who is ISO?

- ISO is a network of national standards bodies that develop international standards
- The U.S. is a member and contributor of ISO through the Accredited Standards Committee (ASC)

What is ISO 20022 for Payments?

- Robust standard with room for additional payment-related information that supports the end-to-end flow of information about a payment from the originator to the beneficiary

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What do I need to know...



1. Is ISO 20022 a discussion topic within your organization?
2. Have any of your corporate customers inquired about ISO 20022? If so, what were the drivers?
3. Does your payments processor/software provider offer ISO 20022 as a messaging standard option?

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ISO 20022 Happenings in the U.S.

2012 ISO 20022 Remittance Coalition Study

Not at all familiar	→ 61%
Not very familiar	→ 29%
Somewhat familiar	→ 9%
Very familiar	→ 1%



2014 ISO 20022 U.S. Stakeholder Group – Business Case Assessment

McKinsey Study - no compelling financial business case, but potential strategic reasons to adopt

Four Strategic Phases	
1. Planning and Education	Promote educational efforts and develop a national strategy for adoption
2. Cross-Border Payments	Enable cross-border wire payments, following by cross-border ACH payments
3. Domestic Payments	Assess value proposition and timing for adoption for domestic wire and ACH payments
4. Additional Consideration	Consider as the standard messaging format for new products and services

2014 Press Release – undertake a multi-year effort to design and develop a secure, real-time payment system incorporating ISO 20022 standard



2015 Federal Reserve: Strategies for Improving the U.S. Payments System
Strategy 4 – achieve greater end-to-end efficiency for domestic and cross-border payments



2015 NACHA White Paper – introduction to ISO 20022 for U.S. Financial Institutions

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A U.S. Stakeholder Group was formed to address the adoption of ISO 2022 payment messages for high-value (wire) and low-value (ACH) payment systems in the U.S.

ISO 2022 U.S. Stakeholder Group

Federal Reserve Bank of New York
 Federal Reserve Bank of Atlanta
 The Clearing House Payments Company L.L.C.
 NACHA—The Electronic Payments Association
 Accredited Standards Committee X9—Financial Industry Standards, Inc.

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ISO 2022 U.S. Stakeholder Group Work Streams

Work Stream	ISO 2022 Stakeholder Group Work Stream Members
High-Value Wire	<ul style="list-style-type: none"> Federal Reserve Banks, Wholesale Product Office (Fedwire® Funds Service) The Clearing House (CHIPS®) X9
Low-Value ACH	<ul style="list-style-type: none"> Federal Reserve Banks, Retail Payments Office (FedACH® Service) The Clearing House (EPN®) NACHA X9

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ISO 20022 use cases for high value and low value payments have synergies with a focus on standards and efficiencies

Use of modern software language, XML, which is **human readable and easier to learn**

Flexibility in data formats and field definition

Opportunity for the **facilitation of STP**

USE Cases

No field length restrictions and no data truncation

The need for the use of a **modern programming language**

Additional identification data elements helps with **regulatory compliance**

Benefit for corporates to be able to send a **single payment instruction** for multiple payment types

Interoperability with cross-border payments

End-to end payment tracking

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A number of strategic reasons have been identified for adopting ISO 20022 in the U.S. for high value payments

- **Investment to modernize the message formats for wire transfer payments in order to meet increasing demands for:**
 - Richer data
 - Easier compliance with evolving regulatory requirements
 - Efficiencies gained from a common format instead of multiple proprietary format
 - Improvements in interoperability given a global economy
 - Opportunities to provide enhanced services to clients
- **Prevent U.S. payment systems from falling behind the rest of the world and be perceived as “outdated,” which could:**
 - Degrade the U.S. dollar’s leadership as a global settlement currency
 - Encourage migration of U.S. dollar clearing offshore, to other currencies, or to emerging payment systems built with new technologies

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The ISO 2022 implementation for Fedwire Funds includes a two-phased approach leading to a mandated sunset date for legacy formats.

Refined Approach – selected and endorsed by the Federal Reserve Format Advisory Group

Two-phased approach that includes a mandated sunset date for legacy formats:

1. Require all banks to **receive** ISO 2022 (*with enhancements*) and **send** ISO 2022 like-for-like.
 - Will migrate banks in waves.
 - Fedwire® Funds Service will translate legacy formats to ISO 2022 and vice versa during conversion period.
 - Legacy formats will sunset at end of this phase.
2. All banks can **send** ISO 2022 with enhancements on the same day.

Scope

- Include both domestic & cross-border wire payments
- Include all components of the U.S. wire systems (all message types, inquiries, reports, etc.)
- Include enhancements based on industry feedback

Benefits of Refined Approach

- ✓ Reduces the transition period and establishes a clear end date to the transition
- ✓ Provides an option for financial institutions ready to both send and receive ISO
- ✓ Allows financial institutions not ready to send ISO with optional enhancements
- ✓ Opportunity for legacy formats to sunset earlier

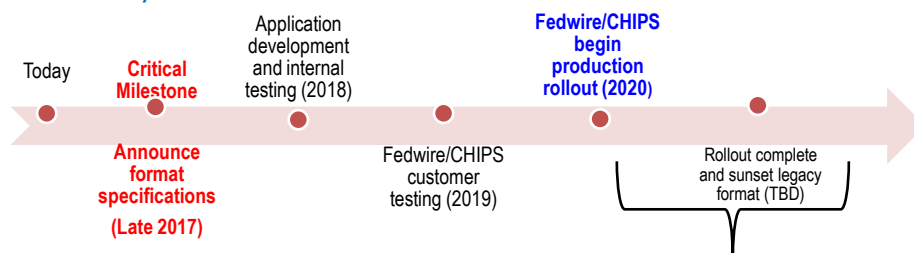
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ISO 2022 for U.S. High Value Systems

Preliminary Timeline



- **Phase 1** – Banks continue to send legacy format and Fedwire/CHIPS convert to ISO 2022 format to deliver to receivers over a conversion period. Cannot move to next phase until all Fedwire/CHIPS participants can receive ISO format
- **Phase 2** – Fedwire/CHIPS will convert participants to start sending ISO messages with enhancements and all participants will need to be able to receive the enhancements

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ISO 20022 initiatives for high value payments are in full gear with some significant accomplishments to date.

Began **detailed work with SWIFT in October 2016** to create project plan and set of documentation that will replace the specification document for the Fedwire Funds Service.

- Mapping documents for all Fedwire Funds messages
- Usage guidelines
- Message flow diagrams
- Implementation “rulebook”

Facilitated **industry engagement** through a number of meetings.

- Format Advisory Group meetings
- Implementation Sub-group meeting
- Enhancement Sub-group meetings
- SWIFT High-Value Payment Systems Plus work group meetings



ISO 20022 initiatives for low value payments are also in full gear with a focus on integration in the U.S. ACH network.



Industry tools and solutions that allow ACH users to leverage the ISO 20022 Payment Message standard for both electronic payments **initiation** and **remittance** without making changes to the current U.S. ACH formats and with the support of the NACHA Operating Rules



ACH integration tools are currently available in the marketplace to support business users and early adopters of ISO 20022

NACHA XML-ACH Remittance Opt-In Program

Allows businesses to transmit ISO 20022 approved payment remittance information for B2B transactions in a standard XML format

NACHA ISO 20022 Mapping Guide

Enables FIs to support business users and early adopters to leverage the ISO 20022 standard with details to map ISO to ACH for select payment types

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Unlike the U.S. high value timeline, the U.S. ACH network is not planning a **conversion to ISO 20022 by 2020; the focus is currently on supporting **integration****

Continue to develop more **extensive mapping guides**

Explore **incremental changes** to U.S. ACH

Identify and ensure **consistency between wire ISO formats and ACH to ISO mapping**

Continue ISO **educational efforts** with U.S. industry stakeholders

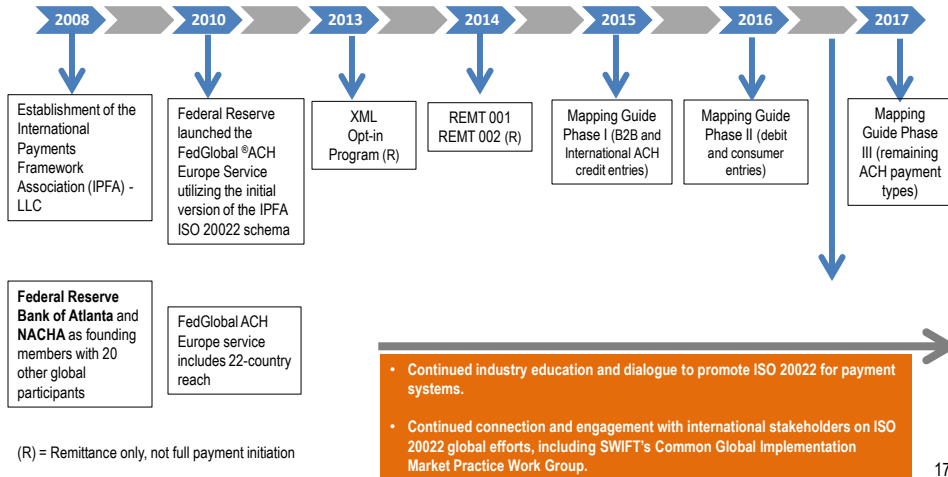
Continue collaboration with U.S. industry stakeholders to **assess needs that may trigger conversion of U.S. ACH network to ISO**

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ROADMAP: ISO 2022 Integration for the ACH Network



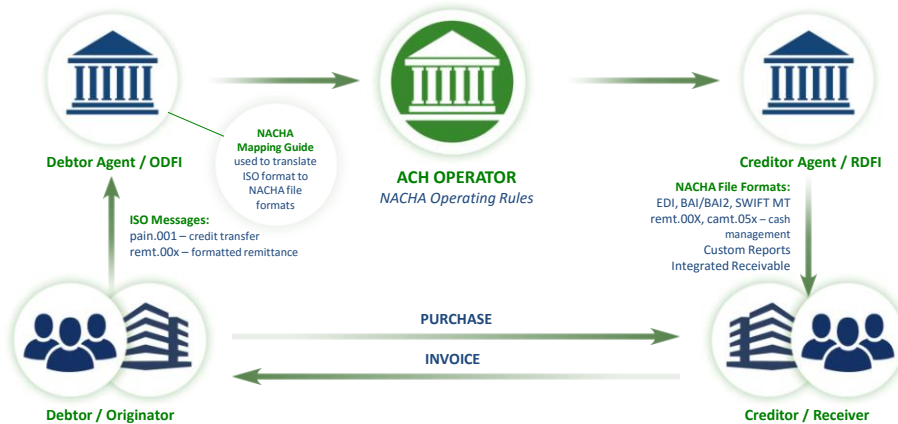
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Available Now - ISO 2022 integration with B2B credit ACH formats

INTERBANK CLEARING AND SETTLEMENT
NACHA File Formats: B2B Credit CCD, CTX, IAT and remittance



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INTERBANK CLEARING AND SETTLEMENT
NACHA File Formats: B2B, C2B/B2C, Remittance, Messaging (e.g. prenotes, returns)



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INTERBANK CLEARING AND SETTLEMENT



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Will the U.S. ever convert its ACH network to an ISO format?

Dialogue with the industry will continue to ensure -



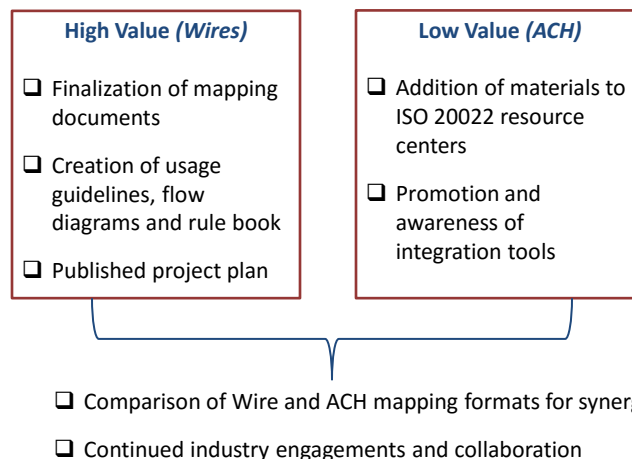
- ☐ Gaps created by ISO 20022 ACH integration are documented and assessed
- ☐ Support for end users and financial institutions is provided for those who want to support integration across all low-value payments
- ☐ Software providers and financial institutions work together with businesses to provide straight-through processing
 - Supported by case study illustrations on integration
- ☐ We continue to identify gaps or opportunities that impact users and the changing payments landscape in order to plan future steps that may trigger conversion

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Industry engagement next steps for the high value and low value work streams



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