ISO 20022 Basics:
What Do I Need to Know?

2017 SFE Conference & Expo
May 3, 2017
Biloxi, MS

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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
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?

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

A U.S. Stakeholder Group was formed to address the adoption of ISO 20022 payment messages for high-value (wire) and low-value (ACH) payment systems in the U.S.

### ISO 20022 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.

### ISO 20022 U.S. Stakeholder Group Work Streams

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<td><strong>High-Value Wire</strong></td>
<td>• Federal Reserve Banks, Wholesale Product Office (Fedwire® Funds Service)</td>
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<td></td>
<td>• The Clearing House (CHIPS®)</td>
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<td><strong>Low-Value ACH</strong></td>
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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**
  - Flexibility in data formats and field definition
  - No field length restrictions and no data truncation
  - Additional identification data elements helps with regulatory compliance
  - Interoperability with cross-border payments
  - End-to-end payment tracking

**Cases**

- Use of modern software language, XML, which is human readable and easier to learn
- Opportunity for the facilitation of STP
- The need for the use of a modern programming language
- Benefit for corporates to be able to send a single payment instruction for multiple payment types

**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
The ISO 20022 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 20022 (with enhancements) and send ISO 20022 like-for-like.
   - Will migrate banks in waves.
   - Fedwire® Funds Service will translate legacy formats to ISO 20022 and vice versa during conversion period.
   - Legacy formats will sunset at end of this phase.

2. All banks can send ISO 20022 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

ISO 20022 for U.S. High Value Systems

Preliminary Timeline

**Today**

- Critical Milestone
- Application development and internal testing (2018)
- Fedwire/CHIPS begin production rollout (2020)
- Rollout complete and sunset legacy format (TBD)

- Phase 1 – Banks continue to send legacy format and Fedwire/CHIPS convert to ISO 20022 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.

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

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.

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

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
**ROADMAP: ISO 20022 Integration for the ACH Network**

- **2008**: Establishment of the International Payments Framework Association (IPFA) - LLC
- **2010**: Federal Reserve launched the FedGlobal® ACH Europe Service utilizing the initial version of the IPFA ISO 20022 schema
- **2013**: XML Opt-in Program (R)
- **2014**: REMT 001 REMT 002 (R)
- **2015**: Mapping Guide Phase I (B2B and International ACH credit entries)
- **2016**: Mapping Guide Phase II (debit and consumer entries)
- **2017**: Mapping Guide Phase III (remaining ACH payment types)

**Federal Reserve Bank of Atlanta and NACHA as founding members with 20 other global participants**

(R) = Remittance only, not full payment initiation

- Continued industry education and dialogue to promote ISO 20022 for payment systems.
- Continued connection and engagement with international stakeholders on ISO 20022 global efforts, including SWIFT’s Common Global Implementation Market Practice Work Group.

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**Available Now - ISO 20022 integration with B2B credit ACH formats**

**INTERBANK CLEARING AND SETTLEMENT**

NACHA File Formats: B2B Credit CCD, CTX, IAT and remittance

**Debtor Agent / ODFI**

**ACH OPERATOR**

NACHA Operating Rules

**Creditor Agent / RDFI**

NACHA File Formats: EDI, BAI/BAI2, SWIFT MT remt.00X, camt.00X – cash management

Custom Reports Integrated Receivable

**PURCHASE**

**INVOICE**

**Debtor / Originator**

**Creditor / Receiver**

ISO Messages: pain.001 – credit transfer
remt.00x – formatted remittance

NACHA Mapping Guide used to translate ISO format to NACHA file formats

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Next - Expand ISO 20022 Integration mapping to all ACH B2B, C2B/B2C and related messaging SECs

ISO 20022 ACH Format – if conversion occurs
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

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

**High Value (Wires)**

- Finalization of mapping documents
- Creation of usage guidelines, flow diagrams and rule book
- Published project plan

**Low Value (ACH)**

- Addition of materials to ISO 20022 resource centers
- Promotion and awareness of integration tools
- Comparison of Wire and ACH mapping formats for synergies
- Continued industry engagements and collaboration
Join the Community at FedPaymentsImprovement.org!

Receive information on task forces and work groups, invitations to live/virtual events, surveys and other online feedback opportunities.

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