The Road to Adoption of ISO® 20022 in the United States

Sibos® Community Session
September 27, 2016

Roy DeCicco, JP Morgan/Accredited Standards Committee X9
Jan Estep, NACHA – The Electronic Payments Association
Jim McDade, The Clearing House Payments Company L.L.C.
Gina Russo, Federal Reserve Bank of New York
Cheryl Venable, Federal Reserve Bank of Atlanta
Agenda

- Background
- Update on U.S. High-Value Systems
- Update on U.S. Low-Value Systems
Background

- U.S. Stakeholder Group 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 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 and Real-Time Payments

- The Clearing House (TCH) and other operators formed Global Real Time Instant Payments Group for Clearing and Settlement Providers in early 2015 to foster practitioners’ dialogue, exchange experience and envisaged solutions, and understand national/domestic scheme discussions.

- An ISO Real Time Payments Group (RTPG) – which includes more than 70 participants from the global payments community – is developing market practice guidance for the use of ISO 20022 messages when making cross-border real-time payments.

The above efforts illustrate the need to continue coordinating global developments and support the strategy for new products to be developed in ISO 20022.
ISO 20022 Update for
U.S. High-Value Payments
Strategic Reasons to Adopt ISO 20022 for U.S. High-Value Payments

- Investment to modernize the message formats for wire transfer payments in order to meet increasing demands for:
  - Richer data (e.g., purpose codes, extended remittance information)
  - Easier compliance with evolving regulatory requirements (e.g., longer name fields, discrete fields for address information including a country code)
  - Efficiencies gained from a common format instead of multiple proprietary formats (e.g., reduced mapping and market practices)
  - 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- Prevent U.S. payment systems from falling behind the rest of the world and be perceived as “outdated,” which could: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
ISO 20022 for U.S. High-Value Systems

Scope

- The Federal Reserve Banks (Fed) and TCH will coordinate their respective adoption of ISO 20022 payment messages for domestic and cross-border Fedwire® Funds Service and CHIPS® payments.

- Their implementations will include:
  - Inputs and outputs for the U.S. wire systems (targeting all message types, inquiries, reports, etc.)
  - Enhancements based on industry feedback.

- The Fed and TCH intend to sunset their legacy propriety formats once their implementations are complete.
ISO 20022 for U.S. High-Value Systems

Preliminary Timeline

<table>
<thead>
<tr>
<th>Today</th>
<th>Critical Milestone</th>
<th>Fedwire/CHIPS</th>
<th>Rollout complete and sunset legacy format (TBD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Application development and internal testing (2018)</td>
<td>Fedwire/CHIPS begin production rollout (2020)</td>
</tr>
</tbody>
</table>

**Announce format specifications (Late 2017)**

- **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
  - Note: The ISO 20022 schemas will contain fields to support enhancements, but the content of the messages will only contain data supported in the legacy 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
Preparing Stakeholders for Change

- Fed created dedicated ISO 20022 resource page on https://fedpaymentsimprovement.org/
- Fed published article in FedFocus\textsuperscript{sm} newsletter in March 2016
- Fed hosted webinars in March/April 2016 to present enhanced ISO 20022 use cases for U.S. high-value systems
- Fed sent communication to Fedwire Funds Service customers and vendors in March 2016 to formally announce ISO 20022 high-level scope, approach, and timeline
- TCH recently sent communication to CHIPS customers to reinforce its commitment to adopt ISO 20022 and to coordinate its implementation with the Fed
- Fed and TCH will send additional communications to keep stakeholders informed of progress
ISO 20022 Industry Engagement in 2016

- SWIFT Market Infrastructures Summit and Standards Forum in May
  - Both Fed and TCH attended and were actively engaged

- SWIFT ISO 20022 Harmonization Charter
  - Fed and TCH have not formally endorsed the charter, but have expressed their general support for its four principles, which relate to information sharing; adherence to global market practices; release management; and publishing information on a common platform

- High-Value Payments Plus Work Group
  - Fed and TCH are participating in SWIFT-led group to establish guidelines for implementing ISO 20022 messages beyond a “like-for-like” approach

- Format Advisory Group
  - Fed and TCH are co-leading an industry group to assist them with detailed planning activities for their respective ISO 20022 implementations, including format mapping and enhancement identification
ISO 20022 Update for
U.S. Low-Value Payments
The ACH Network – Payments Plus Information

The ACH Network in the U.S. differs from many other ACH systems due to its ability to support extensive remittance information and its wide variety of uses.
ISO 20022 strategies for the U.S. ACH network include the integration of and/or conversion of the 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

- Current U.S. ACH file formats are converted to ISO 20022 Payment Messages for all ACH payment types to all endpoints and supported by the NACHA Operating Rules
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 Bank of Atlanta and NACHA as founding members with 20 other global participants
- **2013**: Federal Reserve launched the FedGlobal®ACH Europe Service utilizing the initial version of the IPFA ISO 20022 schema
- **2014**: FedGlobal ACH Europe service includes 22-country reach
- **2015**: XML Opt-in Program (R), REMT 001 REMT 002 (R)
- **2016**: Mapping Guide Phase I (B2B and International ACH credit entries)
- **2017**: Mapping Guide Phase II (debit and consumer entries), Mapping Guide Phase III (remaining ACH payment types)

High-value and low-value collaboration for consistency in wire ISO and ACH ISO mapping of messages and formats. [https://www.nacha.org/ISOresources](https://www.nacha.org/ISOresources)

- 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.

(R) = Remittance only, not full payment initiation
The ISO 20022 Mapping Guides provide standardized guidance to facilitate translation and end-user mapping

**Phase I (2015)**
- Mapping of ISO 20022 pain.001 to corresponding ACH file formats for Cash Concentration and Disbursement (CCD) and Corporate Trade Exchange (CTX)
- Mapping guidance of pain.001 structured remittance data to ACH addenda format for CTX

**Phase II (2016)**
- Mapping of ISO20022 pain.001 to corresponding ACH file format for Preauthorized Pay/Deposit (PPD)
- Mapping of ISO20022 pain.008 to corresponding ACH file format for CCD
- Mapping of ACH Reject Codes to ISO20022 pain.002
- Mapping of ACH Return Entry Codes to ISO20022 to camt.053

**Phase III (2017)**
- Mapping of all remaining relevant ACH payment types

https://www.nacha.org/ISOresources

INTERBANK CLEARING AND SETTLEMENT

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

ACH OPERATOR

NACHA Operating Rules

Debtor / Originator *

Creditor / Receiver *

Debtor Agent / ODFI *

Creditor Agent / RDFI *

*Note: Originator / Receiver & RDFI / ODFI reversed for debit

ISO Messages:
- pain.001
- remt.00x
- pain.002
- camt.05x
- pain.007
- pain.008

NACHA File Formats:
- EDI, BAI/BAI2, SWIFT MT, remt.00X, camt.05x,
- Custom Reports,
- Integrated Receivable

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

• “ISO” is a registered service mark of the International Organization for Standardization.

• “Fedwire,” “FedFocus,” and “FedGlobal” are registered or unregistered service marks of the Federal Reserve Banks.

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

• “SWIFT” and “Sibos” are registered trademarks of S.W.I.F.T. SCRL.

• The Federal Reserve Banks do not sponsor, endorse, or recommend (or provide any warranties, express or implied, regarding) any third party or any third-party products or services referenced in this presentation.