Advancing B2B Electronification Through Standards
ISO 20022 Business Case Assessment

Chicago Payments Symposium
September 25, 2014

Richard Dzina
Senior Vice President
Federal Reserve Bank of New York
Agenda

- ISO 20022 overview

- U.S. business case assessment
  - Background & Scope
  - Key Observations
  - Potential Benefits & Costs
  - Conclusion
  - Recommendations
  - Next Steps
ISO 20022 Overview

What is ISO?
- The International Standards Organization
- The U.S. is a member and contributor through the Accredited Standards Committee (ASC) X9

What is ISO 20022?
- A harmonized set of XML messaging standards across major financial services domains – Cash, Securities, Trade, Card and FX
- Based on a shared data dictionary and business process model
- Freely available to all members of the financial services community
- Foundation of SWIFT’s future standards development (SWIFT MX)

What is ISO 20022 for Payments?
- Robust standard with room for additional payment-related information – addresses end-to-end communications – from the remitter through beneficiary
- Standard being adopted by an increasing number of the world’s payments, clearing & settlement systems
  - Europe, Japan, Switzerland, China, Canada…and more
- Growing interest from financial institutions, corporations and financial applications providers
- SWIFT Standards and the Payments Market Practice Group have developed global implementation guidelines for high-value payments with a cross-border leg
ISO 20022 Business Case Assessment
Background & Scope

- An industry stakeholder group was formed to address whether or not U.S. payments markets should adopt ISO 20022.

- The Stakeholder Group engaged KPMG in October 2013 to objectively evaluate the business case for (or against) adopting ISO 20022 payment messages in the U.S. by:
  - Domestic & Cross-Border Payments for U.S. payments clearing & settlement (PCS) participants
    - Market infrastructures
      - Wholesale (wire): Fedwire® Funds Service & CHIPS®
      - Retail (ACH): FedACH® & EPN®
    - U.S. based financial institutions & their corporate customers

- Scope of Assessment
  - Global Scan
  - U.S. Industry Scan
  - Impact of not adopting ISO 20022 in the U.S.

- Business Case Assessment report finalized in April 2014

"Fedwire" and "FedACH" are registered service marks of the Federal Reserve Banks.
"CHIPS" and "EPN" are registered service marks of The Clearing House Payments Company L.L.C.
ISO 20022 Business Case Assessment
Key observations

- **Global Scan**
  - Different degrees of adoption efforts underway (i.e., mature adopters, interested adopters, growing adopters)
  - In all cases, adoption driven by regulatory mandate; technology upgrades / system consolidations; or, new systems
  - Other considerations:
    - Automation of previously manual processes, which enable operational efficiencies, cost savings and staffing reductions
    - Improvement in quality/quantity of data carried in messages (i.e., to meet regulatory requirements, remittance information)

- **U.S. Industry Scan**
  - Current demand resides among global banks & large corporates, while smaller institutions maintain a general satisfaction with the status quo
  - Lack of awareness/understanding of ISO 20022
  - Difficult to quantify costs and benefits of ISO 20022
  - Unclear interoperability value proposition
  - Low adoption of ERI in the U.S., despite existing capabilities, raises questions among some organizations on how adoption of ISO 20022 will be different
  - Lack of industry/regulatory mandate will make it difficult for U.S. PCS participants to advance adoption efforts
## ISO 20022 Business Case Assessment

### Potential Benefits

<table>
<thead>
<tr>
<th>Potential Benefit</th>
<th>Market Infrastructures</th>
<th>Financial Institutions</th>
<th>Corporates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to better support payments innovation and make changes more easily via the support of only one common payment format vs. multiple formats; eliminate cumbersome mapping</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Support new products &amp; services enabled by ISO 20022 messages (enhanced reporting, e-BAM, e-invoicing, real time payments, mobile)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ability to more easily provide rich data with payments</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>More efficient cross-border payment scheme</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Enable more fluent messaging about the status of payments</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Improve global readiness for regulatory changes</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ability to provide consistent support for global clients</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Enhanced ERP Systems</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ability to centralize treasury operations</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Cost savings related to managing multiple banking relationships</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
ISO 20022 Business Case Assessment

Potential Costs

- Costs to adopt ISO 20022 are difficult to quantify & will vary for participants in the following areas:
  - Technology
  - Implementation
  - Vendors
  - Training
ISO 20022 Business Case Assessment
Impact of not adopting in the U.S.

- Innovation could be hampered by not updating formats/systems at the same pace as other major markets around the world

- Loss of global interoperability with other major markets around the world could impact
  - Competitiveness of U.S. corporates engaged in global trade & their banks/supporting market infrastructures
  - Attractiveness of the USD as a global currency

- Increased cost & inefficiencies of maintaining multiple formats and legacy systems

- Could lead to negative global perception of U.S. as an outlier resistant to change
ISO 20022 Business Case Assessment

Conclusion

- ISO 20022 benefits are largely qualitative at this point and haven’t been fully realized by anyone yet.

- Thus, it is difficult to define an overarching financial business case at the industry level
  - In all cases, upgrade to ISO 20022 in other markets was part of broader technology project or regulatory mandate
  - Other markets reluctant to share proprietary information regarding local business cases

- Nevertheless, momentum exists for ISO 20022 adoption among large global banks and large global corporates

- While there may not be a compelling financial business case at this time for U.S. PCS participants to adopt ISO 20022, there may be strategic reasons to do so.
## ISO 20022 Business Case Assessment
### Strategic Reasons to Consider ISO 20022 Adoption in the U.S. Market

<table>
<thead>
<tr>
<th>Strategic Reason</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Momentum</td>
<td>Large U.S. corporates and banks are actively adopting ISO 20022 and that is expected to continue.</td>
</tr>
<tr>
<td>Global Competition</td>
<td>Compatibility with the ISO 20022 format enables the United States to maintain parity with other global markets and U.S. dollar clearing systems in other jurisdictions that are adopting ISO 20022 messaging, which may help preserve the attractiveness of the U.S. dollar as a global currency.</td>
</tr>
<tr>
<td>Cost Savings &amp; Processing Efficiency</td>
<td>Standardizing message formats allows for consolidation of payments platforms at banks and corporations, which could promote straight-through processing and drive down costs.</td>
</tr>
<tr>
<td>Consistent &amp; Rich Data</td>
<td>The ISO 20022 format enables all parties to leverage a common set of data dictionary elements and expands capacity to carry rich data in the payment message.</td>
</tr>
<tr>
<td>Interoperability</td>
<td>A common format promotes ease of transacting domestically and globally by using a single, open standard rather than multiple proprietary standards.</td>
</tr>
<tr>
<td>Agility to meet evolving regulatory needs</td>
<td>The ISO 20022 format provides for full originator and receiver information (third party or ultimate beneficiary) allowing for improved regulatory reporting and monitoring.</td>
</tr>
<tr>
<td>New, innovative products</td>
<td>A common format across systems reduces the amount of change required to bring innovative new products and services to market.</td>
</tr>
</tbody>
</table>
ISO 20022 Business Case Assessment Recommendations

- Employ a phased approach to ISO 20022 adoption to reduce risk and cost

<table>
<thead>
<tr>
<th>Phase</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Planning &amp; Education</td>
<td>Promote ISO 20022 educational efforts and develop a national strategy for ISO 20022 adoption</td>
</tr>
<tr>
<td>2 – Cross-Border Payments</td>
<td>Enable ISO 20022 for cross-border wire payments; followed by cross-border ACH payments</td>
</tr>
<tr>
<td>3 – Domestic Payments</td>
<td>Assess value proposition and timing for adoption of ISO 20022 for domestic wire and ACH payments</td>
</tr>
<tr>
<td>Additional Consideration</td>
<td>Use ISO 20022 as the standard messaging format for new products and services</td>
</tr>
</tbody>
</table>

  – Establish user ID & password on NACHA website & agree to terms of use to download report.
ISO 20022 Business Case Assessment
Joint Meeting of Fedwire & CHIPS Advisory Groups on September 3, 2014

- General Themes from Advisory Groups
  - While there is consensus among the global banks around the intention to adopt ISO 20022 in the U.S., the means & timing have yet to be determined.
  
  - Given lack of financial business case and regulatory mandate in U.S., use cases that articulate the benefits of ISO 20022 are critical.
  
  - Need to engage others beyond global banks into U.S. planning efforts.
  
  - Adoption of ISO 20022 in the U.S. should not separate cross-border and domestic payments.
  
  - Several implementation approaches were discussed at a high level, but more discussion needed to deep dive into pros, cons and timing.
ISO 20022 Business Case Assessment
Next Steps

ISO 20002 Stakeholder Group will

- Continue to convey results of business case assessment to industry
- Refine and assess implementation approaches
- Engage regional/mid-sized banks, small banks, vendors, corporates and SWIFT into U.S. planning efforts
- Embark on education efforts focused on specific use cases that articulate the benefits of ISO 20022