SULLIVAN & CROMWELL LLP

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Federal Reserve Proposes ISO 20022 Message Format for Fedwire Funds Service

Federal Reserve Seeks Public Comment on Proposal to Replace the Current Fedwire Funds Service Proprietary Message Format with ISO 20022

SUMMARY

On July 5, 2018, the Board of Governors of the Federal Reserve System ("Federal Reserve") requested comments on a proposal to adopt the ISO® 20022 message format for the Fedwire® Funds Service ("Fedwire"). ISO 20022 is an international standard that would replace Fedwire's current, proprietary message format. The planned migration from the existing system to the ISO 20022 format would take place in three phases beginning in 2020 and ending in 2023.[1] Adoption of the standard is expected to both facilitate cross-border payments and permit banks to offer additional services to their payment customers. The deadline for comment is September 4, 2018.[2]

BACKGROUND

Fedwire is a real-time gross settlement system owned and operated by the Federal Reserve Banks ("Reserve Banks") that enables participants to make final payments using their balances held at the Reserve Banks or intraday credit provided by the Reserve Banks. Fedwire and the CHIPS® funds-transfer system, which is owned and operated by The Clearing House Payments Company, L.L.C. ("TCH"), are the main large-value payment systems in the United States ("U.S.").[3]

The current Fedwire uses a proprietary message format that supports multiple types of communications. Fedwire participants can send both "value" messages that order the movement of funds and "nonvalue" messages that do not result in the movement of funds, but rather communicate information or requests to

New York   Washington, D.C.   Los Angeles   Palo Alto   London   Paris   Frankfurt   Brussels
Tokyo   Hong Kong   Beijing   Melbourne   Sydney

other participants.[4] Fedwire also supports messages that enable participants to request account balance information and the processing status of payment orders. Even though Fedwire's messaging format is proprietary, it can be mapped to and is interoperable with the CHIPS proprietary messaging format and the message type format of the SWIFT® messaging network that many banks use to communicate with one another.

The International Organization for Standardization ("ISO") is an independent, non-governmental organization comprised of 161 national standards bodies that publishes standards for a broad range of industries.[5] The ISO 20022 standard includes a suite of messages for the financial industry, including messages for payments, securities, trade services, cards and foreign exchange. ISO 20022 messages use extensible markup language ("XML") syntax and have a common data dictionary that can support end-to-end payment message flow, including payment initiation, interbank settlement and cash management.[6] ISO 20022 messages include structured data elements that provide for potentially richer payment message data than the current Fedwire message format. For example, ISO 20022 messages contain fields for three intermediary financial institutions while the current Fedwire message format contains a field for only one intermediary financial institution.[7]

PAYMENTS INDUSTRY EFFORTS RELATED TO ISO 20022

In 2012, the Federal Reserve Bank of New York and other entities involved in the U.S. payments industry formed a "stakeholder group" to assess the merits of adopting the ISO 20022 standard in the U.S.[8] Based on the findings of the stakeholder group, the Federal Reserve recommended in its January 2015 *Strategies for Improving the Payment System* paper that the U.S. payments industry "[d]evelop an implementation strategy for the application of the ISO 20022 standard to U.S. payment transactions."[9]

Since 2015, the Reserve Banks have worked with TCH on plans to adopt ISO 20022 for Fedwire and CHIPS.[10] The Reserve Banks and TCH have decided to pursue the implementation of ISO 20022 independently, but will align the implementation of the new format on Fedwire and CHIPS to the extent possible.[11] The Reserve Banks also conducted extensive public outreach concerning a migration from the current Fedwire to ISO 20022 in order to obtain input from banks, software vendors and other stakeholders on how to implement ISO 20022 for Fedwire.

From a global perspective, many foreign wire transfer systems, including those for currencies of key U.S. trading partners, have adopted ISO 20022 (*e.g.*, China, India, Japan, Switzerland) or have announced plans to adopt ISO 20022 (*e.g.*, Canada, European Union, Hong Kong, United Kingdom).[12]

POTENTIAL BENEFITS OF ADOPTING ISO 20022 FOR FEDWIRE

The ISO 20022 message format will allow Fedwire participants to include richer and more structured data in their messages, such as increased character lengths for name data elements and discrete elements for address information, including a country code. The data could help banks and other entities meet evolving requirements to screen payments for sanctions and anti-money laundering purposes.[13]

In terms of cross-border payments, adopting ISO 20022 as a common, global standard could also reduce operating costs for banks and their customers by reducing the need to map payment information from one message format to another. This could improve the efficiency of end-to-end processing of multi-leg domestic and international funds transfers.[14] ISO 20022 supports a structured format for including extended remittance information ("ERI") in business-to-business payment messages. Widespread adoption of ISO 20022 will create a common, global format for ERI that could encourage depository institutions and their customers to invest in the changes needed to support the end-to-end flow of ERI for business-to-business payments, offering significant potential gains in efficiency and cost, and the possibility of new services for bank customers.[15]

The Federal Reserve does not believe that the proposal to adopt ISO 20022 will have an adverse impact on other service providers due to the coordination of the Reserve Banks with other service providers on aligning the ISO 20022 implementation. TCH has indicated that CHIPS and Fedwire will be interoperable to the extent possible once both systems have migrated to ISO 20022 and the Reserve Banks are focused on coordinating with SWIFT on an ISO 20022 network solution so that SWIFT messages can contain ISO 20022 enhanced data.[16]

PROPOSED TIMELINE FOR ADOPTING ISO 20022 FOR FEDWIRE

The Reserve Banks will transition from the current Fedwire message format to ISO 20022 in three phases.

Phase 1 - ISO 20022 Preparation (target implementation date of November 23, 2020): The Reserve Banks will address existing interoperability gaps with SWIFT's proprietary message type format. During this process, the Reserve Banks would eliminate the free-text format option for the originator and beneficiary fields in customer transfer messages and instead require that Fedwire participants use a structured format.[17]

Phase 2 – ISO 20022 "Like-For-Like" Implementation (target implementation period from March 2022 to August 2023): In Phase 2, the Reserve Banks will migrate Fedwire participants in waves to send and receive ISO 20022 messages that have elements and character lengths that are comparable to the current Fedwire message format. During Phase 2, the syntax for the like-for-like ISO 20022 messages will be XML, but the content of the messages will be limited to data elements and character lengths comparable to those supported by the current Fedwire message format. Because the Reserve Banks will transition Fedwire participants to ISO 20022 in waves, Fedwire would translate the current message format to ISO 20022 and vice versa when necessary to accommodate Fedwire senders and receivers that are not using the same format. At the end of Phase 2, Fedwire would move into a stability period lasting at least three months in which all Fedwire participants would send and receive ISO 20022 like-for-like messages. Throughout the stability period, the Reserve Banks will retain the current, proprietary Fedwire format as a fallback option in case one or more participants encounter issues and the Reserve Banks determine that such participants need to revert back to the proprietary format.[18]

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Phase 3 – ISO Enhancements (target implementation date of November 2023): In Phase 3, the Reserve Banks will fully implement ISO 20022 by enabling Fedwire participants to send ISO 20022 messages with enhanced data. It will be optional for participants to send the enhanced data, but all participants will need to be capable of receiving the enhanced data. During Phase 3, participants will also need to determine, consistent with any legal obligations, how to handle the enhanced data that they receive, such as whether (and how) to provide enhanced data to the next receiving bank in the funds transfer. The target implementation date for Phase 3 could be delayed if SWIFT has not yet implemented a solution for its network to support ISO 20022 messages that contain enhanced data.[19]

Fedwire Message Format Documentation and Testing: The Reserve Banks plan to provide nine months for testing the Phase 1 changes in their Depository Institution Testing ("DIT") environment prior to the proposed implementation date in November 2020. Similarly, the Reserve Banks plan to provide at least one year for testing the Phase 2 and Phase 3 changes in their DIT environment. The Reserve Banks expect to publish a final testing plan by the end of 2018.[20]

IMPACT ON FEDWIRE PARTICIPANTS AND SERVICE PROVIDERS

The Federal Reserve expects that participants and service providers that develop their own software or rely on software from vendors to access Fedwire will need to make significant changes to their payment applications or processes to be able to send and receive messages in the revised proprietary format of Phase 1 and in the new ISO 20022 format of Phases 2 and 3.[21] Those most affected by the message type switch are likely to be those institutions that (1) access Fedwire via the FedLine Direct®[22] solution or (2) use the import/export feature of FedPayments® Manager.[23] Fedwire participants that access Fedwire manually through FedPayments Manager-Funds will need to become familiar with the terminology used in, and the information required by, the ISO 20022 format as well as the updated appearance of the FedPayments Manager user interface. The Reserve Banks plan to provide training regarding these FedPayments Manager updates.[24] Some Fedwire participants use an offline, telephone-based service that requires a Reserve Bank employee to enter payment order information into a Reserve Bank application. The Federal Reserve does not anticipate that these participants' current process for submitting payment orders would materially change, but recommends that the participants become familiar with the terminology used in and the information required by the ISO 20022 format so that it can be provided to the Reserve Bank employees.[25]

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July 16, 2018

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ENDNOTES

[1] Federal Reserve, *Federal Reserve Board Invites Public Comment on Proposal to Adopt ISO 20022 Message Format for Fedwire Funds Service* (July 5, 2018), *available at* https://www.federalreserve.gov/newsevents/pressreleases/other20180705a.htm.

[2] Federal Reserve, *New Message Format for the Fedwire Funds Service*, 83 Fed. Reg. 31391 (July 5, 2018) (the "Fedwire Notice").

[3] *Id.* In 2017, Fedwire processed 152,649,633 payments with a total value of approximately $740 trillion and CHIPS processed 112,597,088 payments with a total value of approximately $393 trillion.

[4] *Id.*

[5] *Id.*

[6] *Id.*

[7] *Id.*

[8] *Id.* at 31393.

[9] Federal Reserve, *Strategies for Improving the U.S. Payment System* (January 26, 2018) *available at* https://fedpaymentsimprovement.org/wp-content/uploads/strategies-improving-us-payment-system.pdf.

[10] SWIFT has also initiated a study to consider a transition to the ISO 20022 standard.

[11] Fedwire Notice at 31393. NACHA, which oversees the rules that govern the U.S. automatic clearing house, or "ACH," network, has also participated in the Federal Reserve's stakeholder group studying ISO 20022, and has a number of programs underway to facilitate adoption of the standard in the U.S. *See, e.g.,* ISO 20022 Education and Promotion Work Group of the Business Payments Coalition Vendor Forum, *Understanding ISO 20022: A Resource Guide for Financial Institutions, Corporations, and the Public* (May 2017), *available at* https://fedpaymentsimprovement.org/wp-content/uploads/understanding-iso-20022.pdf (the "Resource Guide").

[12] *Id.*

[13] *Id.*

[14] *Id.*

[15] *Id.* at 31393-4. *See* Resource Guide at 1 ("Specific benefits cited by corporates that have adopted ISO 20022 include: lower information technology support costs; easier maintenance and troubleshooting; increased straight through processing and visibility into cash balances globally; and mobility of cash across banks and regions.").

[16] *Id.* at 31395-6.

[17] *Id.* at 31394. The proposal noted that most of the changes anticipated during Phase 1 would be necessary even if the Reserve Banks did not plan to adopt ISO 20022.

[18] *Id.*

[19] *Id.* at 31394-5.

[20] *Id.* at 31395.

[21] *Id.*

[22] *Id.* FedLine Direct access to Fedwire is an unattended, IP-based computer interface, usually employed by participants with larger volumes of funds transfers.

ENDNOTES (CONTINUED)

23   *Id.* FedPayments Manager is a web-based application used by midsize and smaller Fedwire participants to create, send and receive payment orders and nonvalue messages. The import functionality built into FedPayments Manager allows participants to upload payment files from separate payment applications, typically applications that interface with customer-facing systems, so that the participants do not have to enter messages one by one into the application. The export functionality allows participants to download files from FedPayments Manager into other applications, most commonly so that payments can post to customer accounts on participant deposit systems.

24   *Id.*

25   *Id.*

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