

November 7, 2019

Ms. Ann Misback, Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue, N.W.
Washington, DC 20551

Subject: Response to Docket No. OP – 1670 Federal Reserve Actions to Support Interbank Settlement of Faster

We appreciate the Board of Governors of the Federal Reserve's announcement to develop a new interbank 24x7x365 real time gross settlement service ("Settlement Service") with integrated clearing functionality to support faster payments in the United States. We support the Reserve Banks undertaking this important effort to improve the US payment system.

In addition to the features that were announced in the request for comment, we ask that the Reserve Banks include the features and capabilities in this response in the technology design and, ideally, in the initial release of the FedNow service.

Directory

For faster payments to operate effectively in the US, providers and their customers will need access to a directory service that is updated in real-time for the routing of real-time payments. The importance of including a real-time directory service in the initial release of the FedNow service cannot be over emphasized.

The effectiveness criteria set forth for end-to-end faster payment solutions by the Faster Payments Task Force ("Task Force") specified that in order to receive a very effective rating, the solutions should "enable an Entity to initiate a payment with limited information (e.g., with a name, email address, and/or phone number) as appropriate for each use case..."¹

A directory scheme based solely on a routing number assigned to the financial institution followed by account numbers within that financial institution is insufficient for the following reasons:

¹ Effectiveness Criteria, Faster Payments Task Force, January 26, 2016. Page 8.

- Account numbers support both debit-pull and credit-push transactions and are therefore sensitive information that need appropriate protection that can be achieved through properly designed directory.
- Financial institutions perform updates of the routing number directory on their own schedules and it can take several weeks for updates to be posted by all financial institutions.
- Corrections in the master routing table held by the Federal Reserve, once identified, are based on submission of paperwork which can take several weeks to complete.

The Task Force recommended² the establishment of an “inclusive directory work group to identify and recommend a directory design for solutions to interoperate in the faster payments system.”³ In response to recommendation four and under the leadership of the Federal Reserve, a directory work group was organized to evaluate current directory designs and recommend a directory service design to support the adoption of faster payments.

The Task Force’s expected outcomes from recommendation four⁴ are as follows:

- To enable a payer to send a payment without being required to provide the payee’s account information.
- To enable a payee, or the payee’s service provider, to register a single alias with a single directory to receive payments originated through any participating alias-based payment service; and
- To stand up a commercially viable model of directory services that can be used for both business and consumer payments.

Although the Task Force envisioned that these outcomes would become the responsibility of a directory workgroup inside the US Faster Payments Council, we ask that the Fed include a commercially viable directory service as part of the Settlement Service.

Furthermore, the Task Force recognized the need for “developing a design for directory services for achieving the core ecosystem goal of interoperability.” Interoperability is addressed separately later in this response. However, the RTP private sector

² The U.S. Path to Faster Payments, Final Report Part Two: A Call to Action, July 2017.

³ The U.S. Path to Faster Payments, Final Report Part Two: A Call to Action, July 2017. Recommendation 4. Page 31

⁴ Establish an Inclusive Directory Work Group, Goals and Recommendations, [Faster Payments Task Force website](#) July 2017.

arrangement has chosen to utilize the existing directory services routing number and account number scheme, which does not satisfy the Task Force’s effectiveness criteria.

While the Task Force did not specifically ask for the Federal Reserve to develop a directory service, now that the Federal Reserve has made the decision to develop a Settlement Service, we encourage including directory services that very effectively satisfy the Task Force effectiveness criteria and outcomes from recommendation four⁵ of the Task Force’s final paper.

Extensibility

While not widely recognized as important as directory services or interoperability, configurable payment workflows are a critically important characteristic of next generation real-time settlement systems.

During the term of the Task Force, KPMG was invited to give an educational presentation⁶ on Faster Payments in Global Markets. Slide 12, titled “Next-Gen Success Factors”, mentions extensibility and “easily configurable workflows”. Workflows are less known in payments when debit and credit entries are made in the accounts. However, configurable payment workflows are an important characteristic because they allow a series of ordered events to be executed with a transaction that can include, for example, a pause for manual input before resuming automated execution of the ordered events or sending notifications through multiple channels (e.g. email, mobile app, or SMS).

In addition to configurable workflows, extensibility and interoperability is significantly improved when the Settlement Service technical design can support sending and receiving in standard payment message formats (e.g., ISO 20022, ISO 8583) and other communication formats (e.g., JSON). The Task Force envisioned this type of extensibility when drafting the effectiveness criteria.⁷

A real-time settlement service design that appropriately incorporates configurable payment workflows is more extensible, flexible, and adaptable to changes in technology, regulation, laws, and standards as envisioned by the Task Force in the effectiveness criteria.⁸ We encourage the Federal Reserve to require extensibility as envisioned by the

⁵ Establish an Inclusive Directory Work Group, Goals and Recommendations, [Faster Payments Task Force website](#) July 2017.

⁶ Educational webinar on Faster Payments in Global Markets presented by Chris Hadorn and Troy Hagey, KPMG, LLP October 11, 2016.

⁷ Faster Payments Effectiveness Criteria, Faster Payments Task Force, January 26, 2016. Page 13, Efficiency, Payment Format Standards, E.4 and Page 14, Efficiency, Scalability and Adaptability, E.6.1

⁸ Faster Payments Effectiveness Criteria, Faster Payments Task Force, January 26, 2016. Page 16, Safety and Security, Risk Management, S.1.

Task Force in the features and capabilities for the technical design and initial release of FedNow.

Application Programming Interface

Although widely understood as a method for simplifying the communication between different systems or applications, an Application Programming Interface (API) was not specifically included in the Task Force’s effectiveness criteria. However, an API enabled with FedNow can provide the foundation for responsible innovation for financial service firms. In contrast to other methods, “financial services companies can potentially deploy APIs that allow for the inclusion of robust security features, greater transparency and access controls for consumers, improved data accuracy, and more predictable and manageable information technology costs.”⁹

We encourage the Federal Reserve to include in the design of the Settlement Service an API with strong security features and access controls for consumers that can become the foundation for responsible innovation for developers of value added applications.

Request for Payment

Request for payment was included in KPMG’s Next-Gen Success Factors slide; however, it was not included by the Task Force when authoring the effectiveness criteria. With the ubiquity of email and other messaging services (e.g. SMS, Whatsapp, Slack, Teams, etc), one may ask, “why is it important that a request for payment be included in the RTGS?”. The question merits discussion. There are at least two important considerations for including request for payment in the technical design for next generation real-time settlement. First, request for payment can substitute for debit-pull in a credit-push-only, real-time settlement design. Second, a Settlement Service with an API creates a stronger case for request for payment as a means to ensure that the payers have an opportunity to authorize each payment order by having an API call generate a request for payment that is authorized by the payer prior to execution of the transfer.

We encourage the Federal Reserve to include request for payment to replace debit-pull and to allow applications using the API to submit a request for payment to a payer.

⁹ A Financial System That Creates Economic Opportunities, Nonbank Financials, Fintech and Innovation, Report to President Donald J. Trump. U.S. Department of the Treasury, July 2018, P. 26

Interoperability

Interoperability will lead to the important outcomes of amore rapid pace of adoption and, ultimately, ubiquity. Interoperability is not a single feature or capability but rather a set or combination of features and capabilities that enable communication between faster payment network operators and/or applications developed to utilize faster payments. Interoperability is enhanced with the features included in this response including an application programming interface, extensibility, and a directory service.

Interoperability was envisioned as an important part of the Task Force’s effectiveness criteria for achieving ubiquity by stating that the faster payment solution provider

“...should have a credible plan to achieve interoperability. The plan should demonstrate credibility by showing that a payment initiated through one operator/network/Provider can be received by a User served by another operator/network/Provider.”¹⁰

Interoperability among payment networks operators should be reasonable to achieve because of the rapid pace of advancement in technology; however, according to Robert Hunter, the Executive Managing Director and Deputy General Council of The Clearing House Payments Company, it is possible to invest a billion of dollars in a real-time payment network and yet not be interoperable. Mr. Hunter testified before the US Senate Committee on Banking, Housing, and Urban Affairs,

“Today, the [RTP] network represents the culmination of The Clearing House and the private sector’s collective investment of more than \$1 billion to design, build, launch and commercialize a real-time payments network in this country.”¹¹

When asked by Senator Kerry Moran (R-Kan) of the RTP network’s capability for interoperability with the proposed FedNow service, Mr. Hunter stated:

“We do not envision that the systems will be interoperable because clearing and settlement and transmission of the message and final payment happen immediately. Those two things aren’t separated and you

¹⁰ Faster Payments Effectiveness Criteria, Faster Payments Task Force, January 26, 2016. Page 7, Ubiquity, Accessibility, U.1.6.

¹¹ [Statement by Mr. Robert Hunter](#), Executive Director and Deputy General Counsel, The Clearing House Payments Company, U.S. Senate Committee on Banking, Housing, and Urban Affairs, “Facilitating Faster Payments in the U.S.” Page 6, September 25, 2019.

can't interoperate in that regard. So, we are not optimistic, that these two systems will be interoperable.”¹²

We encourage the Federal Reserve to include these features and capabilities in the initial launch of the FedNow service to ensure interoperability with other providers of real-time payments.

We believe that the most efficient way to achieve payment system wide improvement for the US is for the Federal Reserve to develop a 24x7x365 Settlement Service. With the announcement of the Federal Reserve's decision to become an operator, important next steps include technology design decisions for features and capabilities of the Settlement Service. To that end, we ask that the Federal Reserve include a directory service that is updated in real-time to enable routing of payments in real-time but also provide security for sensitive information. We also ask that the Federal Reserve include in the technical design and initial launch extensibility and interoperability capabilities that include an open API, configurable payment workflows, and support for multiple message formats to enable interoperability and to achieve rapid adoption and ubiquity.

Sincerely,

A handwritten signature in dark ink, appearing to read "W. Bradley Wilkes", with a long horizontal flourish extending to the right.

W. Bradley Wilkes
CEO

¹² Full Committee Hearing, Facilitating Faster Payments in the U.S., U.S. Senate on Banking, Housing, and Urban Affairs, Recorded Video, banking.senate.gov, 01:02:20 into the video stream.