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Renata B. Hesse
Acting Assistant Attorney General
Antitrust Division
Department of Justice
Main Justice Building
Room 3109
950 Pennsylvania Avenue NW
Washington, DC 20530

Re: The Clearing House Payment Company LLC's Request for Business Review Letter

Dear Ms. Hesse:

The Clearing House Payments Company LLC ("TCH") requests a business review letter under C.F.R. § 50.6 concerning TCH's plan to introduce a real-time payment ("RTP") system in the United States. This letter and certain of the exhibits contain commercially sensitive operational details and strategy, the disclosure of which would have a detrimental effect on TCH and its owner banks. TCH requests confidential treatment to the fullest extent provided for by 28 C.F.R. § 50.6(10)(c).

The RTP system will be the first new payments system in 40 years capable of clearing and settling interbank transactions. It will do so in ways that will expand competitive options and introduce efficiencies into the payments marketplace by meeting consumer and business demands for new payment services, reducing costs, and improving safety, security, and consumer protections.

The RTP system will further provide a framework for increased competition and innovation among participating depository institutions, regardless of their size and whether or not they are TCH owner banks. The RTP system will also support competition by banks and nonbank payment service providers ("PSPs") in the development of new payment services that can use the RTP system and other existing or to be developed payment systems. Moreover, because of the broad participation that the participation rules allow, innovative payment services that participating depository institutions and third party service providers ("TPSPs") may create could be disseminated to a far greater extent than may be possible on competing systems.

More specifically, the RTP system will provide secure, immediate settlement and content-rich messaging that will incentivize the development of innovative payments products and services. The RTP system offers a host of enhancements over existing payment systems, including interbank funds settlement that is truly real-time, with a speed measured in only seconds, rich content messaging, and other significant improvements designed to ensure the safety and soundness of the system. The RTP system will enable U.S. consumers and businesses to send and receive immediate payments directly from and to their

existing bank accounts, securely, at any time. It will offer faster access to funds, enhanced convenience, and increased certainty, control, finality, and transparency.

The RTP system will be the result of a collaborative effort by TCH and its 24 owner banks, many non-TCH-owner banks, TPSPs, and other interested parties. The RTP system is expected to launch in the second half of 2017. TCH is uniquely suited to operate the RTP system given its current effective operation of other payment systems. The RTP system will address the increasing demands of consumers and businesses for ubiquitous, safe, secure, and efficient real-time payment options, while at the same time creating no barriers to the continued use of existing payments systems. It also will address the Federal Reserve's call for the implementation of "a safe, ubiquitous, faster payments capability" to fill a "key gap" in the United States payments marketplace.[1] The RTP system also will have enhanced messaging that will link payments, invoices, and other remittance advice and thereby reduce errors and costs.

Below, we explain the need for a real-time payment system in the United States and provide background about TCH and its owner banks (Section I), and describe the core features and structure of the RTP system the rules, fees, and other conditions relating to participation in or use of the RTP system, and how the system and its participation and other rules fall well within the scope of permissible competitor collaborations under the antitrust laws (Section II). TCH respectfully requests that the Antitrust Division issue a statement of its present intention not to seek any enforcement action against TCH's proposed business activities described herein.

I. FACTUAL BACKGROUND

A. TCH

TCH is a Delaware limited liability company owned by 24 commercial banks: Bank of America, N.A.; Bank of the West; Barclays; The Bank of New York Mellon; Branch Banking and Trust Co.; Capital One, N.A.; Citibank, N.A.; Citizens Bank; Comerica Bank; Deutsche Bank Trust Co. Americas; Fifth Third Bank; HSBC Bank USA, N.A.; JP Morgan Chase Bank, N.A.; KeyBank N.A.; Manufacturers and Traders Trust Co.; MUFG Union Bank; PNC Bank, N.A.; Banco Santander; State Street Bank & Trust Co.; SunTrust; The Toronto-Dominion Bank; UBS AG; US Bank N.A.; and Wells Fargo, N.A.[2]

TCH currently provides payment, clearing, and settlement services to over 300 depository institutions, including its member banks. TCH clears and settles transactions worth approximately $1.7 trillion every day. TCH provides these services over its three "industrial-strength" payment systems: (1) The Clearing House Interbank Payments System ("CHIPS"), a funds-transfer (wire) system; (2) the Electronic Payments Network ("EPN"), an automated clearing house ("ACH") network; and (3) the TCH Image Exchange Network, a check-image clearing house. On the basis of its role as the operator of the CHIPS wire system, TCH was the first financial market utility to be designated as systemically important under Title VIII of the Dodd-Frank Act. Regulatory oversight of the RTP system will be provided directly through the combined federal agency oversight (FRB, OCC, FDIC) of TCH under the Multi-Regional Data Processing Servicers ("MDPS") supervision program, which oversees certain technology service providers

[1] Federal Reserve System, *Strategies for Improving the U.S. Payment System* ("Fed 2015 Study") at 16 (Jan. 26, 2015), available https://fedpaymentsimprovement.org/wp-content/uploads/strategies-improving-us-payment-system.pdf; Federal Reserve Banks, *Payment System Improvement – Public Consultation Paper* ("Fed 2013 Study") at 3-4 (Sept. 10, 2013), available at https://fedpaymentsimprovement.org/wp-content/uploads/2013/09/Payment_System_Improvement-Public_Consultation_Paper.pdf.

[2] In addition, City National Bank and First Citizens Bank share a TCH Board seat.

to depository institutions.[3] Each of the payments systems operated by TCH has unique characteristics that make it particularly advantageous for particular use cases and no existing payment system is being retired as a result of the implementation of RTP. TCH will continue to operate its CHIPS, EPN, and check imaging systems even as it commences its operation of the RTP system.

TCH's owner banks have funded the development of the RTP system. The owner banks, however, will not realize a return on that investment from fees charged by TCH in connection with the system. TCH operates on a "utility" model, charging fees only to cover the costs incurred in operating its CHIPS, EPN, and check imaging systems and to support future innovation, and does not pay dividends to its owner banks. Accordingly, to develop a project such as the RTP system, capital infusion from the TCH owner banks has been provided, and the owner banks will benefit by participating in the RTP system and enhancing their abilities to compete more effectively among themselves and with non-TCH owner banks and nonbank payment service providers ("PSPs").

B. The Basics of Payment Transactions

As a preliminary matter, the competitive significance of the RTP systems as the first new payments system in 40 years, must be understood in the context of how payment transactions are initiated and completed. This section provides this overview.

Non-cash payment transactions generally comprise five steps, which often (although not necessarily) occur in the following order. First, a payer or a payee initiates the payment process, such as by writing a check, swiping a credit or debit card, or making an online bill payment. Second, the payer authorizes the payment by giving permission to make the payment, such as by signing a check, entering a pin number, or logging in to an electronic account and pressing enter. Third, via messaging technology, information is exchanged to support the payment, such as by scanning and transmitting a check image or transmitting card data. Fourth, the payment is cleared when payment instructions are transmitted, confirmed, and reconciled. Fifth, the payment is settled when the funds are exchanged to discharge the payment obligation, either by interbank net settlement or gross settlement via the Federal Reserve.

There are two basic types of payment transactions, which are categorized based on the way they are initiated: debit pull and credit push. In debit pull transactions, the payee instructs its bank to pull funds from the payee's account. The payee may initiate the pull using the payee's account information (*e.g.*, for an ACH debit) or payment credential (*e.g.*, debit or credit card), or by depositing a check. As an example, a payer may provide her debit card to the payee to pay for the purchase, and the payee then may initiate the pull of funds by instructing its bank to collect payment from the payer's bank through a card network. Credit push transactions, on the other hand, involve the payer initiating the transfer of funds, instructing the payer's own depository institution to "push" or send funds into the account of the payee. Credit push transactions include wire transfers, ACH credits, and certain types of debit and credit card transactions (*e.g.*, to push funds to the account of a customer who has returned merchandise). For example, if an employer seeks to pay wages to an employee via an ACH credit, the employer initiates the transaction by instructing its bank to pay the employee by sending funds into the employee's account. Because credit push transactions require the payer to initiate the transfer, they are inherently less susceptible to abuse or fraud as compared to debit pull transactions, which allow a payee to pull funds from the payer's account based on credentials supplied to the payee.

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[3] As the FFIEC explains, "technology service providers to banks are supervised under the MDPS program when the service provider processes mission-critical applications for a larger number of depository institutions that are regulated by more than one Agency, thereby posing a high degree of systemic risk; or from a number of data centers located in different geographic regions." FFIEC, *Supervision of Technology Service Providers,* October 2012, at 4, available at http://ithandbook.ffiec.gov/ITBooklets/FFIEC_ITBooklet_SupervisionofTechnologyServiceProviders(TSP).pdf.

Both banks and nonbank PSPs may offer payment services. Examples of PSPs include PayPal, Apple (in its role as the provider of ApplePay), Venmo, Dwolla, and Square. To complete a payment transaction, however, a bank or PSP (as well as the traditional card networks, *i.e.,* Visa, MasterCard, American Express, and Discover) relies on existing payment systems for clearing and settlement where funds are transferred between accounts at different depository institutions. This includes cases when a nonbank PSP holds its users' funds in a pooled account at a bank.[4]

Today, there exist three U.S. payment systems that clear and settle interbank transactions: check image exchanges; the Automated Clearing House (ACH) system[5] (including TCH's EPN system and the Federal Reserve's system); and wire transfer services (including TCH's CHIPS system and the Federal Reserve's Fedwire). Such systems are also known as "rails," as they provide the functionality over which all interbank electronic financial transactions ultimately "ride" in order to complete the clearing and settlement of funds. The RTP system will be a new, fourth payment "rail," and will compete with check processing, ACH, and wire systems. It also will compete with cash (because, like cash, it will be immediate) and with other payment methods that are now or might in the future be offered by banks, nonbank PSPs, and the card networks. Notably, however, the varied nature of payment types will necessitate continued support for existing payments systems even once the RTP system is commercially launched. By way of example, the ACH system will still be most efficient for certain payment transactions, *e.g.,* regularly scheduled batched payroll payments. Where speed, data rich messaging, and enhanced safety and security are desirable, however, the RTP system may be a preferred system. Regardless, customers will select which payment system to use. TCH will not "steer" users with respect to using one payment system over another.

C. Existing Payment Methods and Systems are Not Ubiquitous, Immediate, and Efficient

The procompetitive significance of the RTP system is evident because existing payment methods and systems do not support ubiquitous, immediate end-to-end completion, and they do not offer the full menu of functions that will be available by using the RTP system. The following subsection describes the limitations of existing payment methods that will be addressed by the RTP system in ways that will create efficiencies, improve user experiences, and widen consumer choices, all of which are benefits that courts have found to be procompetitive.[6]

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[4] An interbank payment system is not needed for "on us" or "book transfer" transactions. These are transactions where both the payer and the payee have an account with the same bank, or if users of a nonbank PSP that provides account services seek to transfer value to other enrolled users of that same service. Under such circumstances, the bank or the PSP may transfer value internally by updating its records to reflect the change in the account balances of the payer and payee. However, a payment system is needed when: (1) a bank customer transfers funds outside of that bank; or (2) a PSP customer seeks to transfer funds outside of that service by, for example, moving funds to her bank account.

[5] ACH is an electronic payment network operated subject to rules established by NACHA-The Electronic Payment Association, through which depository institutions send each other electronic credit and debit transfers. ACH was designed to allow payers and payees the ability to reduce or eliminate the use of paper checks to make routine payments.

[6] *See Law v. NCAA*, 134 F.3d 1010, 1023 (10th Cir. 1998) ("increasing output, creating operating efficiencies, making a new product available, enhancing product or service quality, and widening consumer choice" recognized as procompetitive); *United States v. Brown Univ.*, 5 F.3d 658, 674 (3d Cir. 1993)("The Supreme Court has recognized improvement in the quality of a product or service that enhances the public's desire for that product or service as one possible procompetitive virtue"), citing *NCAA v. Board of Regents*, 468 U.S. 85, 114-15 (1984).

Cash. A cash transaction is immediate, but the use of cash as a payments method is costly and inconvenient. The use of cash exposes the merchant to the risk of theft, robbery, and counterfeiting.[7] To protect cash from risk of theft and loss, a payee must adopt security measures (such as surveillance cameras and security guards), secure storage procedures, and counterfeit-detection training.[8] Processing cash payments is time-consuming and labor-intensive, and the cost of transporting cash to a depository institution imposes significant costs on the merchant.[9] Payees also incur opportunity costs in lost investment income because cash is usually held for days before it is deposited with a bank.[10] Finally, cash can raise money laundering concerns because it is untraceable.

ACH. ACH is a batch processing system for electronic payments that originated in the 1970s. Depending on various factors, such as the time of day a transaction is initiated or whether it is a bank business day, a standard ACH transaction may take up to three days to complete (*i.e.*, from payment initiation to the time that funds are made available to a payee). Same-day ACH, which recently has become available, provides faster transaction settlement and funds availability. Same-day ACH is an enhancement to the functionality of the existing ACH system and not a new real-time payment system. Rather, as the Federal Reserve has noted, same-day ACH is "complementary to any new real-time payments capability"[11]—*i.e.*, it will be available for use in cases where it is not necessary to complete transactions in real time. Such use cases may include, as previously mentioned, regularly scheduled payroll transactions. In addition, both standard and same-day ACH pose risks of unauthorized debit pulls from a payer's bank account, thus increasing the risk of fraud. Further, ACH payments are not final when made. A payer may reverse a payment within a specified time under applicable rules, thus increasing uncertainty for payees that good funds have been received. These characteristics can increase the costs for overall transactions due to the possibility of returns, unauthorized purchases, and payment of insufficient funds. Further, the ACH system (with respect to both standard and same-day transactions) also does not offer the robust messaging capabilities that the RTP system is designed to provide.

Checks. Check payments "are not universally fast or efficient from an end-user perspective by today's standards."[12] Depending on various factors, such as the amount of a check or the length of time a depositor's account has been open, it may take several days for funds to be made available to a payee, thereby creating uncertainty whether a check transfer was successful and whether, and when, funds will be available for the payee's use. Check transfers also lack finality because they carry the risk of unauthorized pulls from the payer's bank account and a possible return of funds (*e.g.*, for insufficient funds or fraud). Use of checks also imposes substantial costs.[13]

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[7] *See* C. Arango & V. Taylor, "Merchants' Costs of Accepting Means of Payment: Is Cash the Least Costly?," Bank of Canada Review, Winter 2008-2009, at 16, available at http://www.bankofcanada.ca/wp-content/uploads/2010/06/arango_taylor.pdf. *See also* Deloitte, Real Time payments are changing the reality of payments at 2 (2015) ("cost to support cash in the US is $200 billion annually"), available at htpp://www.deloitte.com/content/dam/Deloitte/us/Documents/strategy/us-cons-real-time-payments.pdf., citing The Fletcher School, Tufts University, Cost of Cash in the United States Infographic (2013), available at http://fletcher.tufts.edu/CostofCash/United States.

[8] *Id.*

[9] *Id.* at 16-17.

[10] *Id.* at 17.

[11] Fed 2015 Study at 22 n.30.

[12] *Id.* at 3-4.

[13] Fed 2015 Study at 13 (checks carry "a relatively high societal cost"); Rene M. Pelegero, Retail Payments Global Consulting Group LLC, The Need for Real Time Payments in the US at 3 (June 13, 2013)("counting mailing days and weekends, every day there are nearly $135 billion USD 'in flight' that cannot be used or invested by the beneficiaries of these payments - a considerable waste of capital").

Wire Transfers. Wire transfer systems are "wholesale" payment systems that process the vast majority of the value of interbank payments. Wire transfers are, however, ill-suited for most day-to-day transactions, and as a descriptive matter, such is not their typical use. They are expensive, generally limited to high-value transactions, and accommodate only limited messaging capability. Although faster than most other current methods, they typically settle in real-time only during system operating hours, and in some cases the availability of funds to a payee and confirmation to a payer that a transaction was completed may be delayed.

Credit and Debit Cards. Payment card networks offer a real-time promise of payment to the payee, but generally do not provide real-time availability of funds. While the card networks allow for payment clearing, the interbank settlement of card transactions occurs through one of the existing payment rails (*e.g.*, by wire transfer). In addition, credit and debit cards create risks of return or "chargebacks" and of unauthorized pulls from the payer's card or bank account. Neither has any enhanced messaging capability, and interchange and merchant discount fees apply to both. Credit and debit card transactions, unless tokenized, also require the disclosure of the payer's account information, which poses the risk that stored payment information may be stolen (*e.g.*, in a data breach) and misused.

PSP Payment Methods. There are new services designed to provide consumers with convenient methods to send funds to others, but those services do not provide for real-time transfers between bank accounts, have other limitations (*e.g.*, only enrolled users of a service may send and receive funds), and generally utilize existing payment rails to settle transactions. Visa and MasterCard offer faster payment products—Visa OCT and MasterCard Send—which they advertise as allowing consumers and businesses to send and receive funds in 30 minutes or less (some transactions within seconds). These products, which are primarily targeted for use in connection with person-to-person (P2P) transfers and business-to-consumer (B2C) disbursements, run over the debit rails and thus have all of the limitations associated with credit and debit cards.

Emerging non-bank service providers and the services they offer, such as PayPal, Venmo, Apple Pay, and Google Wallet, are also "coming to the market quickly with innovative product offerings" designed to meet the need for faster payments.[14] Except for "on us" or "in-system" transfers of funds (*e.g.*, by payers and payees using the same digital wallet), these solutions leverage the ACH and card networks and so are constrained by the limitations of those systems.[15] As the Federal Reserve has found, because many of these emerging alternatives are "limited participation systems where both sender and receiver must join" and "do not have a broad base of members," it is "inconvenient or impossible" for a "sender in such a system to send money in near real time, with confirmation of good funds and timely notification, to a receiver outside the system."[16] Questions regarding the safety and security of these services also exist because these non-bank providers are not subject to the same level of regulatory supervision and examination as are banks and bank-related service companies. "As a result, these innovations, when considered in total, have not resulted in a ubiquitous near-real-time system."[17]

Bank Developed Payment Methods. Banks are also pursuing new payment alternatives. One example is Early Warning/clearXchange, which is a collaboration of seven banks that offers a service that allows users to send funds using the payee's email address or phone number. This offering is targeted, at least at the outset, for P2P real-time transactions. Although real-time availability of funds may be

[14] Fed 2015 Study at 6.
[15] Currently, and for the foreseeable future, "on us" transactions are expected to constitute only a small percentage of total payment volume.
[16] Fed 2013 Study at 2, 3, 5.
[17] *Id.* at 3.

provided to the payee through a "memo post,"[18] the clearing and settlement of such transactions, currently takes place over the ACH system, or the Visa or MasterCard networks, creating follow-on credit risk. RTP may provide a means for eliminating that credit risk, as a bank may determine, once the RTP system is available, to clear and settle Early Warning/clearXchange transactions over the RTP system, thus allowing for full real-time completion of interbank transactions.

D. Demand for a Ubiquitous, Immediate, and Efficient Payment System in the United States

With no ubiquitous real-time payment system, the United States' domestic payment system is lagging behind systems in other countries that already have adopted, or are in the process of adopting, more modern systems. The Federal Reserve has said that the United States must adopt a real-time payment system to "help maintain [our] global competitiveness."[19] The Federal Reserve has further concluded that a ubiquitous "safer, more efficient and faster payment system contributes to public confidence and economic growth,"[20] and could "improve the efficiency of the U.S. payment system" and "benefit at least 29 billion transactions per year, which is 12 percent of the total for the country."[21] The transactions that could benefit from a faster payment system are concentrated "primarily within" the person to person (P2P), business to business (B2B), consumer to business (C2B), and business to consumer (B2C) use cases, which the Federal Reserve found have a "'need for speed' ranging from hours (intraday) to minutes, and possibly seconds."[22] The Federal Reserve has recognized that this can be achieved "only through collective efforts" of "a range of payment participants."[23]

The Consumer Financial Protection Bureau ("CFPB") is also urging adoption of faster payments capabilities because of "the potential benefits to consumers."[24] In the July 2015 release of its "Consumer Protection in New Faster Payment Systems" core principles, the CFPB explained that "[f]aster payment systems hold great promise for consumers," which "may provide them with greater utility and more effective account management, enabling [them] to take greater control of their financial lives."[25]

Similarly, consumers and businesses demand a ubiquitous, real-time payments system. The Federal Reserve has confirmed these increasing demands, especially for ubiquitous, safe, secure, and real-time or near-real time payment systems, with accompanying informational and messaging features.[26] More specifically, according to the Federal Reserve, consumers and businesses prefer payment options that provide: (1) real-time or near-real-time availability of funds;[27] (2) timely notifications that a payment has

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[18] Banks use "memo posts" to provide accountholders with a temporary credit for the funds associated with a transaction that will settle at a later time.

[19] Fed 2015 Study at 8-10.

[20] Federal Reserve, Press Release, *Federal Reserve Issues "Strategies for Improving the U.S. Payment System"* (Jan. 26, 2015) (quoting Federal Reserve Board Governor Jerome H. Powell), available at https://www.federalreserve.gov/newsevents/press/other/20150126a.htm.

[21] Fed 2015 Study at 9-10, 17, 38.

[22] *Id.* at 9-10, 17. The Fed Report uses the descriptors of "person to business" (P2B) and "business to person" (B2P) in place of C2B and B2C, respectively. For purposes of this letter, we adopt these latter references and use them as having the same meaning as the Fed's use of P2B and B2P.

[23] Fed 2015 Study at 1, 6, 29.

[24] Consumer Financial Protection Bureau, *Consumer Protection Principles: CFPB's Vision of Consumer Protection in New Faster Payment Systems* at 1 (July 9, 2015), available at http://files.consumerfinance.gov/f/201507_cfpb_consumer-protection-principles.pdf.

[25] *Id.* at 3.

[26] Fed 2015 Study at 7, 9, 28-29; Fed 2013 Study at 1, 3-4.

[27] Among payment speeds (*i.e.*, the speed of funds debited from the payer and credited to the payee) of instant, one hour, 12 hours, 12-24 hours or 2-3 business days, 69% of consumer payers and 75% of business payees preferred

been made;[28] and (3) the ability to send payments without giving account information to payees.[29] Moreover, "[u]biquity" is an "important payment attribute:" most consumers and businesses agree that they "won't use a payment method unless it is used and accepted by most people and businesses."[30]

E. The Slow Adoption Rate of Electronic Invoicing is a Major Barrier to a Ubiquitous Real-Time Payment System

An inefficiency of major payment systems identified by the Federal Reserve Bank of Minneapolis is the slow adoption of electronic invoicing, despite demand from government, business, and consumers for a system that makes electronic invoicing easy.[31] Currently, online bill pay systems often result in a transaction that is electronic for only part of its path: if only one of the transacting parties is willing to participate in an electronic transaction, "often times they maintain and rely on checks if related elements of the end-to-end process, such as the invoice, cannot also be migrated to electronic forms."[32] Thus, surveys have shown that businesses regard "the inability to exchange payment related information electronically such as the invoice" as a barrier to increased adoption of efficient electronic payments.[33] While one party may realize some benefit if only it participates in an electronic transaction, the "materially greater benefits are gained in lower costs, cash management, fewer errors, risk mitigation and transparency when the entire process is electronic."[34]

In particular, the electronic invoicing from the payee to the payer is the "necessary first step" to achieving an end-to-end electronic transaction.[35] This is because it "links the internal processes of enterprises to payment systems."[36] If electronic invoicing were to become ubiquitous, the savings and efficiencies, according to the Minneapolis Federal Reserve, likely would range from $4 to $8 per invoice, meaning that the aggregate savings would exceed $100 billion annually.[37] This is because electronic invoicing bypasses many of the steps in handling paper, including printing, processing, and transporting a paper invoice.[38] In addition, "a reduction of 10 billion paper invoices annually in the U.S. could eliminate close to 200 tons of paper; save over one million trees; and reduce greenhouse gas emissions by 360 tons."[39]

Wider adoption of electronic invoicing will also produce increasing benefits as the adoption rate grows. Electronic invoices will create a payment transaction with lower potential for errors, which will reduce costs. The system will automatically link a payment to an invoice, which will eliminate the administrative errors arising from, for example, a payer directing even an electronic payment to an incorrect account number or entering an incorrect payment amount.

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instant or one-hour payment speed. Moreover, for businesses, "fast availability of funds was the most important element of payment speed." Fed 2015 Study at 28-29.

[28] At least 70% of consumer and business payers stated that it is important to receive timely notifications when a payment has been deducted from their account and when a payment has been received by the payee. *Id.* at 29.

[29] When making a payment, not having bank account information given to payees was important to over 80% of consumers and businesses. *Id.*

[30] *Id.* at 9, 28-29.

[31] Fed. Res. Bank of Minn., "U.S. Adoption of Electronic Invoicing: Challenges and Opportunities," June 30, 2016, at 1, available at https://fedpaymentsimprovement.org/wp-content/uploads/e-invoicing-white-paper.pdf.

[32] *Id.*

[33] *Id.* at 7-8.

[34] *Id.*

[35] *Id.* at 2.

[36] *Id.* at 7.

[37] *Id.* at 2-3.

[38] *Id.* at 6.

[39] *Id.* at 3.

As a result, adoption rates today are low for electronic invoicing and bill pay. Only about 25% of electronic transactions in the United States involve electronic invoicing. Without new incentives to use the invoices, adoption rates are expected to rise annually only 5% or less, meaning that only 38% of United States invoices will be exchanged electronically by 2024.[40] That is far too low a level for the economy to realize the benefits of electronic invoicing.

One of the principal impediments is that the benefit of electronic invoicing and bill pay flows disproportionately to the payee. Decisions by payers and their banks to accept and respond to electronic invoices create positive multiparty externalities for payees, meaning that the payees benefit more than the payers from the payers' decision to respond to the electronic invoice. Thus, payers have little incentive to change their behavior to address or "internalize" those externalities because they do not realize the full benefit of their decision to respond to the electronic invoice. To increase adoption of electronic invoicing, payees must convince payers that they, too, will benefit from an end-to-end electronic transaction. Payers must be offered an incentive that is substantial enough to overcome payers' relative indifference to receiving electronic invoices and making corresponding electronic payments.

II. TCH'S REAL-TIME PAYMENT SYSTEM

TCH's RTP system is designed to meet the demand identified by the Federal Reserve and others for a ubiquitous payment system that provides real time or near-real time transactions, and which also meets the regulatory safety, soundness, security, and consumer protection requirements that depository institutions (and TCH) must satisfy. To this end, the RTP system is designed to achieve ubiquity by permitting all depository institutions, regardless of whether they are TCH owner banks and regardless of their size, to participate in the system. RTP system rules also permit participation by nonbank PSPs. The RTP system will be supported by an open architecture that will avoid technical barriers for participation. And, the system is agnostic as to both use case (*e.g.*, B2B, C2B, B2C, P2P) and channel (*e.g.,* mobile phone, computer, tablet, etc.).

The RTP system's core features are designed to ensure not only faster payments, but also payments that are safer and more secure than those afforded by existing systems and that enhance the user/consumer experience to a greater degree. These core features include the requirements that only "credit push" and not "debit pull" transactions ride on the RTP system, and that all payments be final when made, thereby enhancing certainty of transactions. The RTP system will also support data-rich value-added messaging based on the ISO 20022 standard (an open, international standard for financial communications), which will enhance the user's experience and enable cost savings by limiting reconciliation errors and improving record keeping efforts.

The RTP system's rules are expressly directed to maintaining the safety and security of every transaction consistent with applicable regulatory requirements and consumer protection criteria and other guidance established by the Federal Reserve, the CFPB, and other regulatory agencies to protect the United States' payments infrastructure.

Each of these attributes is discussed more fully below.

A. TCH's Governance of the RTP System

TCH will operate the RTP system in the same manner as it operates its existing payments systems. As such, there will be reliance on the same TCH administrative infrastructure as used by the other systems, and the same regulatory oversight applicable to existing systems will extend to the RTP system.

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[40] *Id.* at 5

TCH's Supervisory Board, comprised of Chief Executive Officers of TCH's owner banks, supervises, provides direction, and has overall responsibility for TCH's business. TCH's Managing Board reports to the Supervisory Board and is composed of senior executives from TCH member banks who have "sufficient knowledge, authority and influence to represent the multiple lines of business" of the member and are able to "make decisions and commitments" on the member's behalf.[41] The Managing Board is responsible for oversight of TCH's business, financial performance, and for setting TCH's strategic agenda for TCH's existing payment systems, and it will do the same for the RTP system.

Reporting to the Managing Board will be the Real Time Payments Business Committee (the "RTP BC"), composed of representatives of member bank payments operations with specific expertise in the subject matters of the RTP system. The RTP BC will have responsibility for business-level input to the RTP system's operations, as well as governance over the RTP rules, with the power to amend those rules as circumstances warrant. Input regarding the RTP system rules may be provided by any participant, as well as the public.[42]

Neither the TCH Managing Board nor the RTP BC will be involved in developing or modifying the anticipated Request for Payment ("RFP") incentive fee discussed in Section II.C.3 below. A panel independent of the Managing Board and the RTP BC will determine the initial RFP incentive fee, and it will have the authority over time to change the incentive fee to ensure that it provides the proper incentives for continued use of the RTP system. The panel will be composed of two independent economists and a TCH business representative with knowledge of the RTP system's operations.

Subject to direction of the RTP BC, TCH staff will have the responsibility to enforce the RTP rules to ensure that the integrity of the RTP system is maintained—*i.e.,* that the system operates in a manner consistent with the required safety, soundness, security, and consumer protection regulatory requirements to which it and participants will be obligated to adhere, and to ensure that the system supports the efficiencies it is designed to achieve. Thus, TCH staff will have the authority to enforce the rules against participating depository institutions; impose fines for non-compliance; and limit, condition, suspend, or terminate participating depository institutions or users use of the system.[43]

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[41] *See* Exhibit 1, TCH Bylaws at § 2.2.

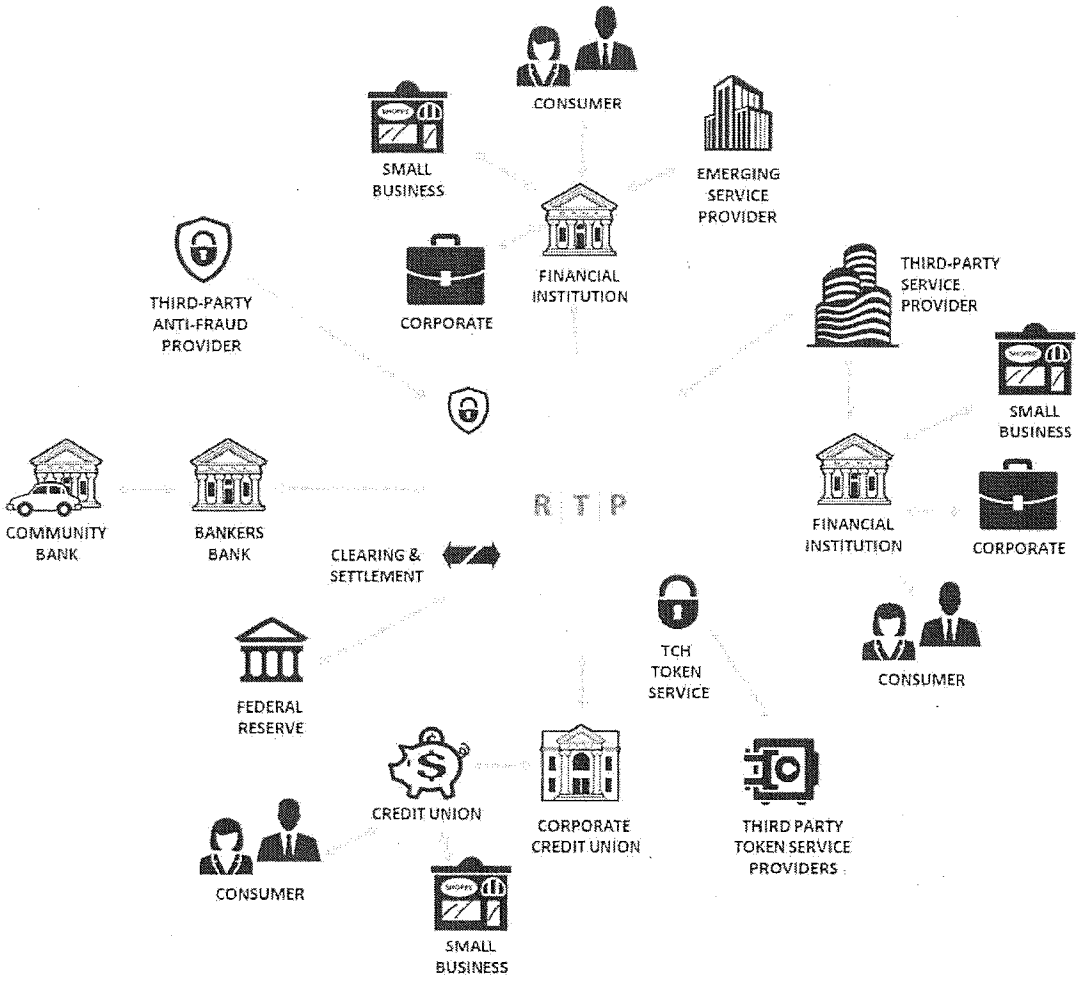
[42] *See* Exhibit 2, RTP Operating Rules at 11-12, § I.G.2. The initial rules were adopted for the RTP system through consultation by TCH staff with interested stakeholders, including representatives of owner banks, non-TCH owner banks, credit unions, third party service providers and others, and were further informed by criteria developed by the Federal Reserve's FPTF and guidance for faster payments developed by the CFPB. The RTP rules will become effective upon the launch of the RTP system.

[43] *See id.* at 35, 36, 39, §§ X.A.1, X.B.1, X.C.2.

B. The RTP System Will Support Broad Participation

Figure 1 reflects the structure of and participation in the RTP system. The system has a purposefully open design so that it can support broad participation by firms at different levels of the value chain and best achieve the ubiquity of use contemplated by, among others, the Federal Reserve.[44]

Figure 1:



[44] Multiple means of connection to the system are being provided, and the figure is representational of the multiple options that depository institutions will have to secure connectivity. Community banks, for example, can connect directly to the system and can also connect through a bankers bank or through a TPSP.

The role and opportunity of each of the players in the RTP ecosystem as depicted in Figure 1 is as follows.

1. TCH's role

TCH will provide the real time clearing and settlement services available over the RTP system. These services will enable participating depository institutions to use the RTP "rail," over which existing payment services and new innovative ones may "ride," permitting users (*i.e.,* the depository institutions' customers) to securely and instantaneously send and receive payments, directly to and from their existing bank accounts any time, 24/7/52. Depository institutions and billers also will be able to offer more complex end-to-end services, including, for example, integrated invoicing and bill payment services.

TCH will support messaging services compliant with the ISO 20022 standard. These services will include real time payment status notifications, which will provide increased transparency in connection with each transaction and also support information-rich flexible payment and non-payment messages for existing products and new product innovations. The ISO 20022 standard supports payment messages of 140 characters (which is a multiple of characters supported by current systems) and remittance advice messages involving thousands of characters (many multiples greater than accommodated by existing systems).

TCH will make available optional tokenization services that participating depository institutions can use to limit the proliferation of account data and thereby reduce the risk of fraud and hacking. TCH will continually undertake anti-fraud monitoring of the system to support the safety and security of the overall system.[45]

2. Depository Institution Participation

Participation in the RTP system is open to any depository institution[46] so long as:

1. It carries on its business from an office located in the United States;

2. The office in the United States is subject to supervision and regulation by a federal or state depository institution regulatory authority;

3. It has an account with a Federal Reserve Bank or a funding arrangement with an approved "Funding Agent"[47];

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[45] In the payments context, tokenization refers to the use of a unique, randomly generated number (a "token") as a substitute for a customer's bank account or payment card number. Tokens are used to originate payment transactions, cannot be traced back to the underlying payment account number, and may be designed so that they cannot be used outside of a specific merchant or acceptance channel. Tokenization increases payment security by removing account information from systems and applications that do not require it. The Clearing House has developed a token vault known as Secure Token Exchange ("STE") that provides tokenization services. While initial use cases focus on card-based payments initiated through mobile devices, STE is also pursuing tokenization of ACH and real-time payment transactions.

[46] *See* Exhibit 3, Participation Rules at 3, § I.B (defining "depository institution" with reference to the definitions of "depository institution" in § 19(b) of the Federal Reserve Act, 12 U.S.C. § 461(b) and "agency" of a foreign bank in § 1(b) of the International Banking Act of 1978, 12 U.S.C. § 3101).

[47] Participation in Federal Reserve payments systems (*e.g.*, ACH, Fedwire) is similarly limited to U.S. regulated financial institutions. The limitation ensures a consistent regulatory approach that is an important component to the overall safety and soundness of the system.

4. It has the ability, directly or through a third-party service provider, to operate and manage its RTP system activity on a continuous basis, 24 hours a day, seven days a week, 52 weeks a year; and

5. It is approved by TCH as a participant.[48]

These criteria will allow thousands of depository institutions, regardless of size, to connect with the RTP system, thereby advancing the goal of ubiquity. Further supporting that goal is the ability of a depository institution to connect directly to the RTP system, or indirectly through a third party service provider ("TPSP"), such as Fidelity National Information Services, Inc. ("FIS"), Jack Henry Associates, and D+H Corp. TCH has entered into agreements with these TPSPs for purposes of allowing the indirect connection of depository institutions with the RTP system, and TCH is actively seeking to do the same with other TPSPs.

The ability of depository institutions to interconnect with the RTP, system indirectly through a TPSP is particularly important to facilitate participation of smaller banks and other depository institutions such as credit unions, which already have relationships with the TPSPs. These depository institutions will be able to rely upon the technology platforms of the TPSPs without having to bear the same investment costs in upgrading their existing systems. Moreover, the connectivity through TPSPs will generally be based on existing functionality currently provided by the TPSP to its depository institution customers, which the TPSP will upgrade for compatibility with the RTP system.

The structure of the RTP system and participation rules that permit such broad participation will allow for far greater dissemination of innovative payment services that may be developed by TPSPs and participating banks. To the extent that smaller institutions do not have the resources to invest in their own innovation, they will have access to the innovations of their TPSPs, and also to the innovations of TCH. In addition, while some innovative payment services developed by participating banks may be proprietary, even with respect to those new developments, the possibility for technology licensing will exist and broad adoption of new payment services can be facilitated through a common platform.

Whether connecting directly or indirectly with the RTP system, the real time products and services offered by a depository institution will be at the sole and exclusive discretion of that depository institution, as will be the pricing for those products and services. TCH will have no involvement in such determinations, and TCH's antitrust policies will guard against the use of the RTP system to facilitate competitor collaborations regarding such matters.

The RTP system will provide the same ability to access the system regardless of a depository institution's size. For example, the architecture of the system relies on open interfaces that eliminate technical barriers to accessing the system. TCH is working with third party developers to facilitate the availability of interconnected technical capabilities beyond those that depository institutions might develop on their own or which might be provided by TPSPs.

The cost for participating in the system will be the same for all depository institutions, regardless of size. Put differently, there will be no volume discounts that would benefit larger banks based on expected volume projections. In this way, the TCH owner banks are, in effect, subsidizing participation by the smaller institutions by contributing the necessary initial capital for building the RTP system and subsidizing the majority of the system's ongoing costs through their expected greater transaction volumes. TCH owner banks are nonetheless willing to do so because of their opportunities to develop new real-time revenue generating products and services.

[48] *See* Exhibit 3, Participation Rules at 3, § I.A.

Participating depository institutions are also at liberty to participate in the RTP system at different levels, depending on the risk controls they are willing to accept. For example, a depository institution may participate only so that it is able to receive real time payments on behalf of its customers 24/7/52. This type of participation involves a minimal degree of safety and security risk, so the RTP system rules require only a baseline level of compliance safeguards. The next level of participation would be a depository institution having the capability of receiving RTP payments and also sending such payments. Higher levels of participation involve those capabilities plus the ability to support Requests for Payments ("RFPs"), which are the RTP system's electronic bill pay function, or to provide those functions and support the participation of emerging service providers or PSPs in the system. Each higher level of participation increases the risks for abuse of the system, and the prudential obligations of the participating depository institutions increase accordingly.

Finally, participation in the RTP system is non-exclusive. Any depository institution that participates in the RTP system may participate in or use any other payment system or develop and use any payment product, whether or not it is usable with the RTP system. Thus, customers of participating depository institutions will be at liberty to use the RTP system for some transactions while using other systems for other transactions.[49] Participating depository institutions will not be "steered" to the RTP system by TCH, and "network fees" will be incurred only based on actual usage of the RTP system, so no financial penalty will attach if a transaction is cleared and settled over another payment system.

3. Emerging Service Providers or PSPs

As reflected by Figure 1, emerging service providers or PSPs will be able to access the RTP system. These entities are nonbanks that serve as intermediaries in the transmission of funds between payers and payees and, as mentioned, include mobile wallets, PayPal, Dwolla, Venmo, Square, and others. These entities can access the RTP system through a participating depository institution at which they maintain accounts (as all of them already do, in order to use existing payment systems) and subject to certain prudential rules that seek to ensure the integrity of the RTP system's safety, security, and consumer protections.[50] PSPs may access the RTP system by submitting an application to, and gaining approval from, TCH, and performing annual certifications of compliance with applicable PSP rules and criteria.

The compliance criteria specifically applicable to PSPs are modeled on standards applicable to banks when they are engaged in providing payment services to their customers. They fall into four main areas:

1. Consumer protections. Compliance with the same requirements of the Electronic Funds Transfer Act and its Regulation E, including requirements relating to disclosures and receipts, liability for unauthorized electronic fund transfers and error resolution, prohibitions on unfair and deceptive practices, and a requirement that PSPs disclose to consumers whether the consumer's funds are covered by FDIC pass-through insurance.[51]

2. Anti-money laundering and anti-terrorist financing requirements. PSPs will be required to have an AML program that is reasonably designed to prevent the PSP from being used to facilitate money laundering or to finance terrorist activities, and that includes a customer

[49] The Federal Reserve, however, projects that, over an approximately 10-year period, a ubiquitous real-time payment system is expected to displace cash, check, ACH, credit card transactions and, to a limited extent, wire transfers. *See* Fed 2015 Study at 44 (discussing study that showed that, over a 10-year period, depending on design option, payments would migrate from cash (1%), check (27%), ACH (11%) and wire (7%) to a faster payment system).

[50] *See* Exhibit 2, Operating Rules at 16-17, § II.J.

[51] 15 U.S.C. §1693, *et seq.*; 12 C.F.R. Part 205.

identification program, as required by the Bank Secrecy Act and implementing regulations.[52]

3. Prudential requirements. PSPs will be required to have internal controls and information systems, internal audit systems, and other risk mitigation controls that meet the standards applicable to depository institutions under the Interagency Guidelines Establishing Standards for Safety and Soundness.[53] PSPs will also have to post a surety bond, have tangible shareholder equity, and meet permissible investment requirements modeled on state money services business requirements.[54]

4. Data security and privacy. PSPs will have to meet the same requirements applicable to depository institutions under the Interagency Guidelines Establishing Information Security Standards and OCC Bulletin 2011-26. In addition, the PSPs will be obligated to adhere to the same authentication, information security program, and consumer financial privacy standards as national banks, and they will be prohibited from using "bots" to access customer accounts and initiate RTP transactions.

Participating depository institutions that sponsor a PSP will be responsible, and jointly and severally liable, for unapproved connectivity by the PSP and for the PSP's failure to comply with RTP system rules.

These requirements, while not rising fully to the same level as regulatory requirements imposed on depository institutions, seek to ensure that abuses that have been experienced in connection with other payments systems do not occur with respect to the RTP system. TCH has tailored these requirements to achieve this goal, recognizing the benefit of allowing PSP participation in the RTP system.[55]

As with participating depository institutions, participation by PSPs in the RTP system is entirely non-exclusive. PSPs will be able to continue all of their current and future efforts to provide payment alternatives to the RTP system. Moreover, PSP innovation incentives will, at a minimum, remain the same, and may in fact be increased because of increased innovation efforts by TCH, participating depository institutions, and TPSPs to develop new real time products and services.

* * *

Taken as a whole, the RTP system's structure, governance, and participation rules will allow broad participation, leave to participating depository institutions and participating third parties the freedom to determine their own business strategies unilaterally, avoid involvement in product or pricing decisions by participants or third parties, and protect against antitrust-sensitive competitor collusion. The RTP system has been purposefully designed to facilitate interbank competition in the development of new innovative payment models, and to enhance the competition among depository institutions and nonbank payment providers in offering payment products and services.

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[52] 31 U.S.C. §5311, *et seq.*; 12 CFR §326; 31 CFR Part 103.

[53] 12 CFR Part 364.

[54] *See* Exhibit 2, Operating Rules, at 16-17 § II.J.

[55] *See NCAA*, 468 U.S. at 101-102 (restrictions designed to "preserve[]" the "integrity of the product" advance legitimate, procompetitive objectives); *Craftsmen Limousine, Inc. v. Ford Motor Co.*, 491 F.3d 380, 393 (8th Cir. 2007)(protecting consumers and enhancing consumer safety are "legitimately procompetitive").

C. The RTP System Operating Rules Will Create Efficiencies and Enhance Competition

The RTP system operating rules create efficiencies for payment transactions. This is the result of rules requiring the immediate availability of funds and related notifications of successful transactions; imposing safeguards for decreasing fraud and payment abuses, thereby increasing the security of payment transactions and concomitantly decreasing costs; enhancing messaging functionality to support development of new products and reducing communication errors; and establishing an electronic invoicing and billing capability (the Request for Payment, or RFP) that will address the identified limitations that have limited the adoption of electronic invoicing and payments. In addition, the fee structure of the RTP system is designed to be responsive to marketplace developments and impose minimal costs on users.

1. The RTP System's Real Time Clearance and Settlement of Payments Meets Consumer Demands

According to the Federal Reserve survey, 69% of consumer payers and 75% of business payees preferred instant or one-hour payment speed.[56] Moreover, for businesses, "fast availability of funds was the most important element of payment speed."[57] 70% of consumer and business payers recognize as important receipt of timely notifications when a payment has been deducted from their account and when a payment has been received by the payee.[58] Functionality directed to providing each of these features is required as a condition for participating in the RTP system. Specifically, participating depository institutions are required to receive payments 24/7/52, to clear and settle those payments within seconds, and to send related notifications immediately to payers that a transfer was successful and to payees that funds are available.[59]

Each of these requirements will afford payers and payees faster access to and greater control of their cash flow. This will enhance the ability of payers and payees to manage their finances.[60] It also will afford consumers and businesses increased convenience over their payments activities. Each of these benefits will permit both consumers and payers to realize efficiencies in connection with every day and unique payment transactions.

These features of the RTP system will also enhance payments competition in at least the following ways. First, the RTP system represents a new entrant offering a competitive alternative to existing payments systems, which do not have the ability to clear and settle payments in real time, provide the immediate notifications available through use of the RTP system, or support the enhanced messaging capabilities of the RTP system. Such additional competition will afford consumers and businesses greater competitive choices as providers of payment services (whether banks or nonbank PSPs) develop and offer those real-time products and services over the RTP system. Second, the availability of real time clearing and settlement of funds, immediate notifications, and the messaging rich capabilities of RTP will incentivize greater innovation by payment service providers, as well as by existing payments systems that also clear and settle transactions.

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[56] Fed 2015 Study at 28-29.

[57] *Id.*

[58] *Id.* at 29.

[59] *See* Exhibit 2, Operating Rules at 19-21, 22-24, §§ III & V.

[60] Fed 2013 Study at 5 (benefits of real time payment system includes enhanced cash management for consumers and businesses due to quicker confirmation of good funds). "Good funds" means that "the payer's account is valid, funds or available credit are sufficient to cover the payment, and therefore, the payment will not be reversed for lack of funds." *Id.* at n.11.

2. The RTP System Rules Facilitate Safety and Soundness and Enhance the Consumer Experience

Maintaining the safety, soundness, and security of the United States payment system is of paramount importance and the subject of extensive regulatory requirements. As the Federal Reserve has observed, "maintaining appropriate risk-management and security standards across payment system participants can help create a predictable, fair and innovation-friendly environment while also promoting safety."[61] Likewise, consumer protection considerations play a large role in the efficient operation of payment systems, and help to prevent abuses that impose unnecessary costs and operating inefficiencies.

The RTP operating rules are specifically designed to advance safety, security, and consumer protection. For example:

- Only "credit push" transactions are permitted over the RTP system.[62] This will eliminate the risk of unauthorized debits and reduce the opportunity for fraud because payers will not have to reveal any account information as is required in debit transactions.[63] Reducing the likelihood of unauthorized or fraudulent transactions will permit significant cost savings for consumers and businesses.[64] The RTP system is consistent with the CFPB's Consumer Protection Principles for Faster Payments of consumer control over payments and transparency.[65]

- Payments made over the RTP system are final, and cannot be revoked or recalled once authorized by the payer.[66] This creates certainty to both payer and payee, the latter because it will have immediate access to good funds,[67] and eliminates the costs of return of funds or chargebacks.

- Payments made over the RTP system will be prefunded under the rules (*i.e.*, to initiate transactions into the system, a participant must have transferred funds to a prefunded account that is used to effect settlement of each transaction).[68] This prefunding and real-time settlement approach eliminates interbank credit risk and allows the payee's bank to make funds available to the payee immediately. The immediate finality of a transaction and availability of funds to a payee will create additional certainty for payers, and permit more efficient cash management for payees, because receipt of good funds will be assured. A participant's prefunding requirement will vary depending on the size of the bank and expected transaction volumes so smaller banks will not face discrimination or barriers to participating in the RTP system. Small banks also will not face a barrier to participating because the banks' prefunded position will rebalance as payments are sent and received. The ability to obtain the capital

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[61] Fed 2015 Study at 13-14.

[62] *See* Exhibit 2, Operating Rules at 13, § II.C.1.

[63] See Fed 2015 Study at 17 (debit pull transactions "expand[] possibilities for unauthorized parties who have access to payer's account information to fraudulently pull funds out of the payer's account"); NACHA Whitepaper, "Real Time in Real Life: The Impact of a Real-Time Payment System On Its Users," at 5 (2015)("Credit only transactions offer more security [and] more protection from fraud . . . ").

[64] According to the Federal Reserve, "[t]he estimated annual number of unauthorized transactions (third-party fraud) in 2012 was 32.3 million, with a value of $6.4 billion." Fed 2015 Study at 30. Not having to make account information available to payees was also important to 80% of the respondents to the Federal Reserve's 2015 study. *Id.* at 29.

[65] CFPB, *Consumer Protection Principles: CFPB's Vision of Consumer Protection in New Faster Payment Systems*, (July 9, 2015), available https://files.consumerfinance.gov/f/201507_cfpb_consumer-protection-principles.pdf.

[66] *See* Exhibit 2, Operating Rules at 10, § I.E.

[67] This too is consistent with the CFPB's Consumer Protection Principles for Faster Payments. *See*, n.56, *supra*.

[68] *See* Exhibit 2, Operating Rules at 25-26, § VI.C.

necessary for prefunding should not be difficult because bankers' banks are expected to support the efforts of smaller banks. (*See* Figure 1.)

- Consumers who use the RTP system will be protected under existing federal consumer protection requirements, including as provided by the Electronic Funds Transfer Act and its Regulation E, applicable Unfair, and Deceptive and Abusive Acts and Practices statutes and regulations.[69] Under this framework, consumers will benefit from requirements regarding disclosures, error resolution, and limitations on liability for unauthorized transactions. In addition, laws and regulations that may be implicated in connection with the provision of RTP system services include: the Bank Secrecy Act and implementing regulations,[70] which set forth anti-money laundering compliance requirements for depository institutions; the Gramm-Leach-Bliley Act,[71] which governs the treatment of nonpublic personal information about consumers by depository institutions and requires depository institutions to safeguard the security and confidentiality of customer information; the Fair Credit Report Act (as amended by the Fair and Accurate Credit Transactions Act),[72] which requires banks that offer or maintain "covered accounts" to develop and implement a written identity theft prevention program and imposes restrictions on consumer information sharing; the Fair Debt Collection Practices Act,[73] which establishes requirements for "debt collectors," including prohibitions on debt collection methods that are abusive or harassing; and the Expedited Funds Availability Act/Regulation CC,[74] which require banks to make funds deposited into accounts available for use within certain specified schedules, and to disclose funds availability policies pursuant to prescribed content and timing requirements.

- The RTP system operating rules establish specific requirements for information security and customer authentication.[75]

- The system is designed to support routing and processing of tokenized transactions, which will increase payment security and help to limit the proliferation of consumer account credentials. This will significantly reduce the financial impact that can result from a data breach because tokenized account information is of limited or no use to cyber criminals.

- The RTP system operating rules provide TCH with comprehensive authority to prevent the system from being misused by bad actors, including the ability to (i) enforce the rules against participants; (ii) impose fines for compliance violations; and (iii) limit, condition, suspend, or terminate a participant or its customer.[76]

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[69] In addition, Article 4A of the New York Uniform Commercial Code establishes a default, end-to-end framework of rights and responsibilities for banks and their commercial customers engaged in "fund transfers" (e.g., with respect to security procedures and liability for unauthorized transactions). This framework will apply to business-to-business payments conducted through the RTP system.

[70] 31 U.S.C. § 5311, *et seq.*; 12 CFR §326; 31 C.F.R. Part 103.

[71] 15 U.S.C. §§ 6801-6809.

[72] 15 U.S.C. § 1681.

[73] 15 U.S.C. § 1692 *et seq.*

[74] 12 U.S.C. § 4001, *et seq.*; 12 C.F.R. 229.

[75] *See* Exhibit 2, Operating Rules at 16, § II.I.2.

[76] *Id.* at 35, § X.A.1 & 2.

Finally, as discussed in connection with PSPs' use of the RTP system, specific rules and enforcement mechanisms apply to avoid the type of abuses that have been experienced in the past.[77] *See* pp. 13-14, *supra.*

3. The RTP System Messaging Functionality Supports Innovation and Lowers Costs

The RTP system will include flexible messaging options based on the international ISO standard 20022. The RTP system will be the first immediate payment system in the world to implement an extensive range of payment and non-payment messaging capabilities consistent with ISO 20022. "ISO 20022 is a robust financial messaging standard that supports the end-to-end flow of payment information from the originator to the beneficiary."[78] The standard supports rich payment data, discrete fields to carry specific data elements, improved processing and compliance screening, and facilitates cross-border interoperability.[79]

Under ISO 20022, messages of up to 140 characters will be possible with payment transactions, and messages of thousands of characters will be possible in connection with other non-payment transactions. This enhanced messaging capability will permit the development of value added products that can be offered by participants to their customers. A non-exhaustive list of the messaging functionality the RTP will support includes:

- Credit transfer messaging such as multi-purpose payment messages, including those providing remittance advice.
- Requests for Payment, which support funds requests, e-invoicing, and e-billing.
- Payment acknowledgements by payees to payers confirming payment disposition (*e.g.,* invoice paid, goods shipped, etc.).
- Requests for information and responses, which could be where a payee requests additional information about a payment (*e.g.,* a request for an invoice number or purpose of payment).
- Invoice or remittance advice with as much detail as desired by a payer or payee.

The richness of data transmittable over the RTP system will mitigate costs that arise using other payment methods, including misdirected funds, misallocated accounting for payments, and inefficient record keeping. Such costs are substantial. The Federal Reserve has projected that a faster payment system that includes improved information capabilities, like the RTP system, and enables more efficient accounts receivable/accounts payable functions, as the RTP system will do, could bring businesses $10-$40 billion in back-office efficiencies annually.[80]

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[77] *See, e.g.,* the recent consent decree between the CFPB and Dwolla, Inc. regarding deception of consumers about Dwolla's data security practices and the safety of its online payment system, available at http://files.consumerfinance.gov/f/201603_cfpb_consent-order-dwolla-inc.pdf.

[78] Federal Reserve, "In Pursuit of a Better Payment Systems," available at https://fedpaymentsimprovement.org/tag/iso-20022/.

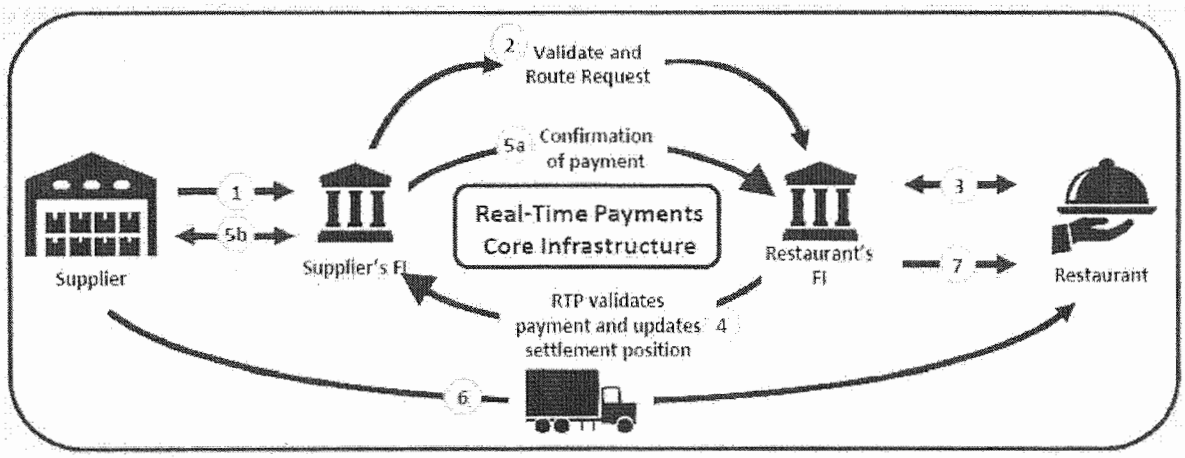
[79] *Id.*

[80] Federal Reserve, *Research Results Summary, Faster Payments Assessment Summary,* available at https://fedpaymentsimprovement.org/wp-content/uploads/faster_payments_assessment.pdf. *See also* Federal Reserve Bank of Minn., n.26, *supra,* at 2-3 (estimating that converting from paper to electronic invoicing could potentially result in aggregate annual savings over a hundred billion dollars).

4. The RTP System's Request for Payment (RFP) Eliminates Barriers for Efficient Electronic Payments

The Request for Payment or RFP functionality is a particularly important messaging capability that is supported by the RTP system. A representative RFP transaction is illustrated by Figure 2 in connection with a B2B transaction:

Figure 2:



As illustrated here, (1) a supplier reviews an order received from a restaurant and sends a RFP through its depository institution, which travels through the RTP core infrastructure's secure, trusted channel to reduce fraud risks; (2) the RTP core infrastructure validates the RFP and routs it to the restaurant's depository institution, which then notifies the restaurant; (3) the restaurant receives the RFP that contains a "Pay Now" button, which when selected, presents to the restaurant a pre-populated payment message that includes all pertinent payment data (*e.g.*, remittance information, payment amount, etc.), so the restaurant can confirm and make the payment to the supplier in real time; (4) the restaurant's depository institution submits the transaction to the RTP core infrastructure that validates the transaction details, provisionally updates the settlement position for the restaurant's depository institution, and sends the payment message to the supplier's depository institution, which in turn confirms that the account number is valid and accepts the payment; (5a) the supplier's depository institution sends a message to the RTP core infrastructure with acceptance of the payment, and the RTP core infrastructure finalizes the settlement position for the restaurant's depository institution and updates the position for the supplier's depository institution in the amount of the transaction; (5b) the supplier's depository institution notifies the supplier of the payment, and the supplier sends a payment acknowledgement to the restaurant, confirming the goods are on the way; (6) the supplier sends the loaded delivery truck to the restaurant, confident of its immediate access to good funds; and (7) the restaurant's depository institution notifies the restaurant, confirming that the goods are on the way with a message arriving through a reliable, trusted channel.

The information exchanged in the illustrated example goes well beyond just remittance advice, which would be common in a B2B transaction. Moreover, the information is trustworthy with a high degree of accuracy. Thus, the remittance data enables the supplier to apply payment to the correct invoice, account for any differences, and reconcile those differences. The payment request, notification message, and confirmation message all provide additional value for a time-sensitive transaction.

The benefits of the RFP functionality have been identified in connection with use cases other than B2B transactions. For example, in a B2C use a customer may need immediate funds from her insurance company to pay for repairs after an auto accident, or for an emergency medical procedure. Similarly, RFPs may be used in C2B transactions, including, for example, where a consumer is late on payment to a utility and the utility wants to avoid the cost of stopping service. The utility could send a RFP with associated messaging advising the consumer of the risk of service termination, possible terms for payment, or other alternatives that would avoid the consumer's loss of service and the utility incurring unnecessary costs.

For the RFP function to gain acceptance, however, the barriers that have been identified by the Federal Reserve Bank of Minneapolis regarding the resistance to e-invoicing and e-billing must be overcome. Two steps are contemplated to do so.

First, the RTP operating rules impose consumer protections in connection with RFPs. This includes the requirement that a participating depository institution be approved and authorized by TCH to deliver RFPs. In addition, the biller or payee's depository institution that delivers a RFP must screen and monitor its customer that initiates the RFP and have the ability to identify fraudulent, abusive, or unlawful uses of the system; must respond to reports from TCH regarding abuse of RFP messaging; warrant that each RFP is made for a legitimate purpose and is not fraudulent, abusive, or unlawful; and warrant that the depository institution has performed appropriate risk-based due diligence on any customers that are permitted to initiate RFPs, will perform ongoing monitoring, and will take corrective action as necessary that may include suspending a customer's ability to initiate RFPs as determined by the depository institution or by TCH through its rules enforcement authority.[81]

Second, in addition to the feature rich attributes of the RFP function, and the consumer protections afforded RFP transactions, a RFP incentive fee will apply in connection with each payment made in response to a RFP. The incentive fee will be paid by the initiating payee's depository institution to the payer's depository institution. The fee will incentivize payers' banks to create products that encourage RTP transactions in response to RFPs.

An economic rationale for the RFP incentive fee exists given the problem identified by the Federal Reserve Bank of Minneapolis that individual payers, as a group, have been slow to accept e-bill/e-pay, despite efficiency advantages. E-bill options currently exist (albeit in less sophisticated forms than the RTP RFP). E-payments in response to e-bills create substantial convenience and savings for billers. Yet, the market evidence is that payers do not participate in large numbers. This may be because the benefits to an individual payer of adopting the use of e-payments in response to e-bills may be small, even though the benefits (*i.e.*, savings for payees and payers) as a whole can be large if individual adoption decisions influence the adoption decisions of other payers, meaning that incentives offered by an individual payee to payers are unlikely to be sufficient to induce consumers to change behavior. As a result, bilateral contracting will not solve the problem. An incentive fee (paid by a payee's depository institution to a payer's depository institution) is a better mechanism to induce the payer's depository institution to take actions to convince its customers to make e-payments in response to e-bills.

The RFP incentive fee will apply only in the limited instance where a payment is made through the RTP system in response to a RFP. If payments are made over the RTP system, but not in response to a RFP, then the incentive fee will not be paid.

To develop the initial RFP incentive fee, TCH will appoint a panel—independent of the TCH Managing Board, RTP BC, TCH's owner banks, and RTP system participants—composed of two non-TCH economists and a TCH business person with subject matter expertise regarding the RTP system. Each member of

[81] *See* Exhibit 2, Operating Rules at 30-32, § VII.

the panel will have an equal vote. The panel will consider marketplace data to assess an appropriate fee that balances the need to incentivize payers to make an RTP payment in response to a RFP, while at the same time not establishing the fee so high that payee depository institutions cannot offer the RFP function to their payee customers at acceptable prices.

Pricing of the RFP function will be solely within the discretion of payee depository institutions. Such pricing will be constrained by the ability of payees to continue using existing billing/invoicing services, including paper and electronic alternatives. Such constraints will also have to be considered by the TCH-appointed panel to ensure that incentives for payees to use the RTP system are appropriately supported, as are those of payers.[82]

The RFP incentive fee will be dynamic, in that the appointed panel will assess available data as the system evolves and usage can be ascertained. Thus, slow uptake by payees could be evidence that the fee is too low; use by payees of alternative payment systems on cost grounds could indicate that it is too high. Based on such data, and other available marketplace data, the appointed panel will have the authority to adjust the RFP incentive fee to incentivize greater use. Any adjustment will account for sunk costs made by RTP participants and seek to ensure certainty of operations of the system.

5. The RTP System's Fees—Driven by the Cost of Providing the Infrastructure

The only other fee applicable to certain RTP transactions is a "network" fee. TCH will charge this fee in connection with (i) each payment made over the RTP system (charged to the payer's depository institution), (ii) the delivery of a RFP by a payee's depository institutions (charged to the payee's depository institution), and (iii) remittance advice messaging (charged to the depository institution through which the message is sent). The fee will be calculated on a cost + basis using a model employed by TCH for estimating its costs in connection with the operation of its existing payment systems, and projected transaction volumes for the RTP system.

The cost + basis for the network fee is to reimburse TCH for its costs of operating the RTP system,[83] and to support TCH's continuing innovation of new functions and features for the system. No amount of the fee will be paid to TCH owner banks. Based on projected RTP transaction volumes, TCH estimates that its costs for developing the RTP system will be recoverable over several years, and in the first two-to-three years TCH will be operating the RTP system at a loss. Once those costs are recovered, and assuming RTP transaction volumes increase as projected, it is possible that the network fee will be reduced. By way of comparison, over time the TCH network fee for ACH transactions has decreased dramatically from when it was first imposed.

The application of the network fee to RFP and remittance advice transactions is also intended for consumer protection and cost control reasons. The network fee applicable to RFPs is intended to mitigate abuses of the RFP function that could result if payees "spammed" payers with excessive numbers of messages. The application of a network fee is intended to disincentivize such uses. In connection with remittance advice transactions, the network fee is intended to minimize abuses of the messaging capabilities of the RTP system. As described, a remittance advice message could include

[82] The RFP incentive fee is not similar to interchange or other fees charged in connection with card network transactions. Neither TCH nor its owner banks derive a profit from the RFP incentive fee. There is no steering in relation to the RFP incentive fee. A payee initiates a RFP in its sole discretion, having the option to choose any other e-bill or e-invoicing alternative, and thereby avoid any interbank fee. In addition, a payer retains the option to pay in response to a RFP over the RFP system, and only if it does would the RFP incentive fee apply.

[83] Most of the cost of initially building the system has been funded by a capital contribution by the TCH member banks.

thousands of characters, and if the messaging were used for other than intended payment transactions, substantial costs could be imposed on the overall system that would detract from its efficiencies.

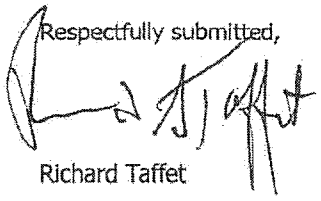
III. CONCLUSION

For the foregoing reasons, TCH respectfully requests that the Antitrust Division issue a statement that it does not presently intend to bring any enforcement action against TCH's proposed business activities with respect to the RTP systems.

We would be pleased to answer any questions or provide any additional information that may assist in your assessment of this request. Given the planned launch of the RTP system in the second half of 2017, TCH respectfully requests that the Division provide as expeditious a response to this request as possible.

Thank you for your consideration.

Respectfully submitted,



Richard Taffet