December 13, 2013

The Federal Reserve Banks
Submitted via comment@fedpaymentsimprovement.org

RE: Payment System Improvement: Public Consultation Paper

Dear Ladies and Gentlemen:

NACHA – The Electronic Payments Association[1] (NACHA) welcomes the opportunity to respond to the Public Consultation Paper on Payment System Improvement (Consultation Paper) published on September 10, 2013 by The Federal Reserve Banks. This letter is intended to address some of the broader themes raised by the Consultation Paper. A more detailed response addressing the specific questions set forth in the Consultation Paper is attached as Exhibit A. We also attach as Exhibit B a copy of NACHA's "ACH Blueprint," described further below. This letter and the detailed response, as well as the ACH Blueprint, represent input from our Direct Members, the NACHA Board, and broad industry input via our councils.

Introduction

Since its inception in the early 1970s, the ACH Network has served as a highly efficient electronic alternative to check payments. Significant uses of the ACH include Direct Deposit of payroll, Social Security benefits, and tax refunds; consumer payments for recurring or one-time bills; business-to-business payments; tax withholding and collections; and settlement transactions for some card systems. Over the last decade, additional use of the ACH includes online account-to-account transfers and person-to-person payments; online banking payments; mobile payments; deposits to payroll cards, and funding and reloads for prepaid cards; and healthcare claim payments. In total, NACHA estimates that ACH payment volume for 2013 will be 22 billion transactions[2] – or more than 87 million transactions every business day – transferring an estimated $40 trillion directly from bank account to bank account.

[1] NACHA manages the development, administration, and governance of the ACH Network, the backbone for the electronic movement of money and data. The ACH Network provides a safe, secure, and reliable network for direct account-to-account consumer, business, and government payments. Annually, it facilitates billions of Direct Deposit via ACH and Direct Payment via ACH transactions. Used by all types of financial institutions, the ACH Network is governed by the NACHA Operating Rules, which guide risk management and create payment certainty for all participants. As a not-for-profit association, NACHA represents more than 10,000 financial institutions via 17 regional payments associations and direct membership. Through its industry councils and forums, NACHA brings together payments system stakeholders to foster dialogue and innovation to strengthen the ACH Network. To learn more, please visit www.nacha.org.

[2] This estimate includes an estimate of "on-us" transactions within a single financial institution.

Through industry dialogue and collaboration, NACHA and both ACH Operators continuously work with the financial services industry to make improvements to the ACH infrastructure, and its governing rule set that provides certainty to all participants in the Network. Uses of the ACH Network have expanded throughout the past ten-to-fifteen years to safely and efficiently encompass the many ways in which end-users choose to transact, whether through check conversion, over the telephone, on the Internet, or via a mobile device. Currently, eighty-five percent of ACH payments are consumer payments, in which a consumer is either the payor or payee of the transaction. In addition, the ACH Network has been a leader in facilitating e-commerce — twenty percent of the total of ACH transaction volume is due to consumer transactions initiated online, offering convenience for consumers to pay bills and transfer funds among accounts. At the same time, NACHA, the ACH Operators and the financial services industry have also adopted and implemented a comprehensive risk management strategy to ensure that the ACH Network remains safe and secure for end-users.

An essential feature of the ACH Network is its ubiquity. Virtually every financial institution in the U.S. participates in the ACH Network. As a ubiquitous system, the ACH Network has the advantage of enabling counterparties at virtually all financial institutions across the country to transact with each other. Ubiquity can often "make or break" payments system innovation, because network effects that exponentially increase the value of the system for all participants can only be achieved when new products or services have attracted sufficient numbers of users from both sides of a transaction. Early participants can therefore find it challenging to develop a business case for participation in a new payment service unless there is confidence that there will be sufficient numbers of counterparties on the other side of their transactions. The ACH Network is well-positioned to enable payment systems innovation because it already links a nationwide system of sending and receiving institutions in a way that provides the backbone for new payments products and services.

Because changes to the ACH Network can affect all financial institutions in the U.S., and can potentially affect end-users as well, NACHA employs a rulemaking process that is participatory, deliberative and transparent, ensuring that changes to the rules and the infrastructure have broad-based support. This rulemaking capability has adapted to serve the industry well for the past forty years, and we can continue to support the industry with this capability as new payment systems evolve.

General Themes Raised by the Consultation Paper

NACHA is generally supportive of the overarching vision for the future of the payments system that is articulated in the Consultation Paper, and we note that many of the major themes in the Consultation Paper are very similar to those articulated in NACHA's "ACH Blueprint" of 2012 (described in Section 2 below). The following are NACHA's thoughts on the most significant themes raised by both the Consultation Paper and our review. More extensive and detailed comments are also provided in our response (Exhibit A) to the specific questions posed by the Fed in the Consultation Paper.

1. Further Articulate Use Cases for Near-Real-Time Payments

The Consultation Paper articulates a vision for "near-real-time payments" in the U.S. NACHA agrees that there are a number of payments use cases that would benefit from being near-real-time. We recommend that the Fed further analyze and differentiate, within the framework of its vision, these use cases to determine which would truly benefit from being near-real-time, and others that are either well served today by existing payment system features or that could be better served with incremental improvements to existing features.

For example, NACHA agrees that some use cases for emerging types of person-to-person payments and mobile payments would be substantially improved from being near-real-time. We also note that within these types of use cases, a further distinction should be made between near-real-time *payments*, and near-real-time *messages* about payments.

As an illustration, consider a hypothetical person-to-person electronic payment in which the recipient might experience a near-real-time feature in one of three ways: 1) the recipient receives a near-real-time *message* that the payment has been initiated, with funds availability to follow according the rules of the specific service or the payment system; 2) the recipient receives a near-real-time *payment*, in which the payment system infrastructure has moved funds to the recipient's bank and in which the bank also has made funds available in the recipient's account, all in near-real-time; and 3) a hybrid method, in which the recipient receives a near-real-time *message* and some amount of funds also are made available in the recipient's account in near-real-time based on payment system rules, while inter-bank settlement occurs sometime into the future. Any one of these three models might be the desired outcome for a specific use case, depending on the specific needs of both senders and receivers, and the economic and risk underpinnings of the system and service providers.

As points of comparison, other systems in the U.S. and in other countries have implemented near-real-time systems based on each of these three types of illustrations above. Examples are clearXchange in the U.S. (which works like illustration #1); Mexico's "SPEI" system (which works like illustration #2); and the UK's Faster Payments (which works like illustration #3).[3]

NACHA thinks that there are many types of payments use cases that are either well-served today by existing payment system features or that could be better served with incremental improvements to existing features. For example, card-based point-of-sale payments work similarly to illustration #1 above. A merchant receives a *message* in real-time from the cardholder's bank that a payment is authorized; actual funds are settled between banks and made available to the merchant generally in 1-2 business days (most often via an ACH credit to the merchant's bank account). These transactions generally carry a guarantee of payment, and card networks have made a substantial number of other system improvements over time to support the needs of end-users. As noted, a merchant receives a message in real-time that a card payment is

[3] NACHA notes that in a system such as Faster Payments, near-real-time funds availability is supported by multiple daily inter-bank settlements. Faster funds availability without more frequent inter-bank settlement would have the unintended effect of increasing settlement risk in the system.

either authorized or declined, allowing the merchant to quickly conclude the transaction with the customer, but without having to wait for the finality of an actual funds transfer.

There are many uses of the ACH for which the benefit of being near-real-time is not clear. These include payroll payments by Direct Deposit; consumer bill payments; and business-to-business payments. In the vast majority of these types of payments, the counterparties are known to each other, and payment due dates are known in advance. The existing ACH infrastructure and processes enable these payments to be authorized and initiated in advance.

Some of these use cases would benefit from moving faster than they do today (i.e., with same-day posting and/or settlement of funds) without necessarily being near-real-time. For example, a same-day payroll capability would benefit employers that need to make payments to significant numbers of hourly employees, or that through errors or missed deadlines need to make an emergency payroll. Similarly, consumers would benefit from being able to execute a same-day bill payment in some situations (i.e., the bill is due today and therefore needs to be credited to their account by the end of the day).

Another important feature of these existing types of ACH payments is that they be maximally efficient, by which we mean the ability for ACH Network participants to move and process large volumes of payments at a relatively low societal cost. Over-engineering a near-real-time system could have the unintended and undesirable consequence of increasing the societal cost for many types of payments for which a near-real-time capability would not materially improve the overall utility of the payment.

Finally, there are many existing payments products and services that have some of the "missing features" noted in the Consultation Paper. For example, as referenced, card systems use near-real-time messages, and because transactions are authorized by cardholders' issuers, are based on good funds. Most ACH credit payments are also based on good funds. More directly relevant to the vision articulated by the Consultation Paper, there is an ACH service that provides most of these features for ACH payments and could be leveraged to achieve objectives: Secure Vault Payments.

Secure Vault Payments today provides the functionality for a near-real-time payment authorization and guarantee to a merchant or biller, followed by an ACH credit payment based on good funds. The service is supported by a participant directory so that the ACH credit is properly routed to the merchant or biller. The consumer does not need to know the banking information of the merchant/biller, and the merchant/biller does not need to obtain or know the banking information of the consumer. In the future, the industry could leverage the Secure Vault Payments model for mobile payments, as well as scenarios for person-to-person or business-to-business scenarios.

The key barrier that Secure Vault Payments has yet to overcome is ubiquity; since Secure Vault Payments is an optional ACH service it cannot achieve the network effect described above without sufficient volumes of users on each side of the transaction. Consumers don't use it if their financial institutions don't participate; financial institutions don't participate if there aren't enough merchants that accept it; merchants don't accept it if there aren't enough customers that

will use it. This "chicken-or-the-egg" problem is difficult to overcome, as each potential participant waits for critical mass on the other side of the system before joining.

EBIDS – the Electronic Billing and Information Directory Service – also meets some of the real-time features envisioned by the Consultation Paper with respect to ACH payments. Through the EBIDS directory, participating billers can route bill summaries to consumers' financial institutions for presentment to the consumers, and receive exception-free, good-funds ACH credit payments in return. Like Secure Vault Payments, EBIDs is an optional service that could be used to achieve the objectives outlined in the Consultation Paper, but that also has faced some of the same challenges in achieving ubiquity as Secure Vault Payments.

These examples demonstrate two points: 1) the technology exists today to layer additional functionality on top of existing payment systems to provide incremental value; and 2) ubiquity of adoption across all financial institutions is frequently necessary to delivering that value. As a general matter, the Federal Reserve could look for opportunities among payments innovations to create or support a network effect to achieve such ubiquity.

2. NACHA's Vision for the Future of the ACH Network is Aligned with the Consultation Paper

NACHA has expended, and continues to expend, significant effort to identify areas of opportunity for improvement of the ACH Network and to implement changes where value can be realized. Many of the opportunities identified by NACHA through this effort are aligned with the opportunities identified in the Consultation Paper. In fact, in 2012, after conducting extensive research and soliciting input via one-on-one interviews from over 50 individual organizations over an extended period, NACHA developed the "ACH Blueprint," which is intended to serve as a roadmap for informing and guiding our approach for making desired changes to the ACH Network over the next 10 years.

Major themes of the ACH Blueprint include:

- Enabling consumers and small business to easily initiate ACH credit transfers from their own deposit accounts, supported by the necessary infrastructure and directories to enable the routing of these payments to recipients without having to know their full banking information;
- Implementing near-real-time payment-related messages for desired use cases, supported by additional daily ACH settlements;
- Enhancing the remittance information capacity and formats of the ACH Network for both business and consumer payments;
- Enabling and removing barriers to cross-border interoperability of ACH-like retail payment systems.

To achieve these objectives, NACHA envisions an ACH architecture in which a near-real-time messaging system is "layered" on top of the existing ACH Network clearing and settlement system (to which incremental improvements would continue to be made). Additional tools such as routing and account validation directories would serve to fully integrate these two layers.

Ultimately, the ACH Blueprint envisions the broad-based use of enhanced ACH credits as an alternative to checks. Enhancements will better enable the use of ACH credits in many situations where check use is still significant, such as for bill payments, person-to-person payments, and business-to-business payments. Most importantly, if routing functions are created that allow delivery to a receiver with or without a known account number, then ACH credits would have the same "pay anyone" functionality of checks, with the added benefit of the electronic efficiencies and risk reduction provided by the ACH network. The advantages of ACH credits could be further enhanced through the development of near-real-time messaging that could allow for faster funds availability under payment system rules (regardless of the speed of the underlying settlement of funds), and the implementation of additional settlement windows to reduce risk within the system between counterparties. Thus, the ACH credit could be the "ubiquitous electronic solution" for payments made directly from one bank account to another.

Example of a ubiquitous ACH credit system

There are approximately 13,000 financial institutions in the U.S.; each holds its customers funds in transactional deposit accounts. These transactional accounts can serve as the foundation for customers of financial institutions of every size and type to initiate ACH credit transfers to the accounts of any other businesses or consumers at all other financial institutions.

The following is a hypothetical example of how the implementation of the major objectives of the ACH Blueprint would result in a ubiquitous, near-real-time account-to-account transfer capability based on good funds, aligning with the vision of the Consultation Paper.

1. A consumer (or small business) logs on to online banking, either via the Internet or via a wireless network using a mobile device, and selects "send money."
2. The consumer enters the amount, at which time the financial institution verifies that sufficient funds are available in the consumer's account (i.e., the payment is based on good funds).
3. The consumer provides identifying information regarding the recipient. It could be, but doesn't have to be, the recipient's bank routing and account number. It also could be an email address, cell phone number, social media contact, or some other unique identifier specifically developed for this purpose. The consumer could also provide reference information to help the recipient identify the payment; for example, "December Rent" for a payment to a roommate or landlord, or a billing or account reference number for a payment to a biller or merchant.
4. The consumer's financial institution verifies the recipient's identifying information in a system database. The system database generates a message to the recipient's financial institution in near-real-time (e.g., sent within 30 seconds) that the payment was initiated and funds are guaranteed. Per payment system rules, the recipient's financial institution makes an agreed-upon amount available in the recipient's account within an agreed-upon time (e.g., 30 minutes).
5. The recipient's financial institution sends a message to the recipient by whichever method is established by the recipient (i.e., email, text alert, automated phone call).

To effect the actual interbank transfer of funds, the sender's financial institution (the ODFI) originates an ACH credit to the recipient's financial institution (the RDFI), batched with all other ACH credits arising out of the same service. All such ACH credits settle at the next available ACH interbank settlement window.

This illustration above shows a near-real-time payments messaging system that is ubiquitous among all financial institutions, is based on good funds, utilizes a common directory, combines the payment with meaningful information, and uses low-risk ACH credits to achieve the actual transfer of funds.

To support this ubiquitous system, the industry would develop the system infrastructure and rules to provide the account masking, routing and verification capabilities, and to deliver near real-time messages among financial institutions. An increase in the number of daily ACH settlements would reduce risk arising from providing funds availability in near-real-time.

Such a ubiquitous system to enable consumers and small businesses to easily initiate ACH credits would allow financial institutions of all types and sizes to compete in the payments market. Financial institutions that today are only the receivers of ACH payments could become originators of ACH payments, giving them a greater stake in the continued viability of the payment system and help them to directly support the needs of their customers. Attention to formats and rules could also allow for greater interoperability with international systems.

For the benefit of readers of this response letter, NACHA is attaching the ACH Blueprint document as Exhibit B. As stated elsewhere in this letter, we would welcome the opportunity to present the findings and objectives of the ACH Blueprint to the Federal Reserve.

3. Available Resources for Investment

While NACHA understands that the Consultation Paper is put forth as a forward-looking vision of the payment system, the Federal Reserve should recognize the broader context of the existing regulatory, compliance and technology environment that the financial services industry operates in today. Without digressing into any of the underlying causes, a significant portion of financial institutions' resources is committed to satisfying myriad new compliance obligations resulting from new statutes, regulations and regulatory expectations. Resources — finite to begin with — that otherwise might be deployed to improve payment system infrastructure and internal systems are instead being committed to other uses.

In order to make investment decisions, the financial services industry will need to identify business cases that support the investments in the infrastructure necessary to enable the features envisioned by the Consultation Paper. This may mean that new economic models will need to be applied to new services in order to justify the investment necessary to bring such services to market. The Federal Reserve will need to be tolerant of these efforts by the private sector.

NACHA recognizes that, like other payment industry participants, the Federal Reserve Banks also are bound by finite resources. To that end, the Federal Reserve and the industry should not expend the additional resources that would be necessary to develop a fully electronic analogue to

the paper check (i.e., the electronic payment order). Such an effort would require a significant level of resources to develop the laws, rules and infrastructure necessary to create a new payment instrument that is not internationally interoperable and is itself modeled on a payment method that is declining in use. Even assuming the industry had the necessary resources available, those resources would be better expended in making improvements to the nation's electronic payments system, such as developing the tools and infrastructure to enable fully electronic ACH credit transfers from any bank account to any other bank account without requiring the production of the recipient's account information. Enhancing these electronic systems would leverage the well-established risk management frameworks and systems already in place for ACH transactions, unlike investments in check technologies that would require substantial investment in new, redundant risk management systems in order to achieve the same benefits to preserve the safety and integrity of the system.

4. Industry collaboration

NACHA commends the Federal Reserve for initiating this dialogue within the payments industry. By our very nature, NACHA creates a forum for industry dialogue and collaboration on payment system topics, most specifically the ACH Network and the *NACHA Operating Rules*. NACHA's history also includes rulemaking for other payment types, and for enhanced capabilities that are layered on top of the ACH Network.

We note that the Federal Reserve is also a practitioner of industry collaboration, and we encourage the Federal Reserve to continue in this role. As a fellow practitioner, NACHA offers our knowledge, experience and rulemaking capabilities in support of the Federal Reserve's ongoing review of improvement of the U.S. payment system. We offer to work hand-in-hand with the Federal Reserve to further define the intersection between the gaps and opportunities identified in the Consultation Paper, and attributes of the future ACH Network outlined in the ACH Blueprint.

Again, NACHA appreciates the opportunity to provide comments on the Consultation Paper. If you have any questions regarding our comments, please do not hesitate to call me at 703-561-1100 or via email at info@nacha.org.

Sincerely,

Janet Estep

Janet O. Estep
President and CEO

Cc: NACHA Membership
NACHA Board of Directors

Exhibit A

December 13, 2013

The Federal Reserve Banks
Submitted via comment@fedpaymentsimprovement.org

RE: NACHA Response to Federal Reserve Questions on Payment System Improvement

Q1. Are you in general agreement with the payment system gaps and opportunities identified above?

The Consultation Paper identifies eight gaps and opportunities in the current payments environment. We address each in turn.

1. *Checkwriting*. While check usage continues to decline as a proportion of overall payment activity, as well as in absolute numbers, the persistence of checks as a means of payment perpetuates inefficiencies, including for receivers who may wish to be paid electronically. In order for electronic payments to more fully supplant residual check activity, alternatives will need to address the principal attraction of the check to payors as a means of payment: the ability to send a check to anyone, anywhere. Ultimately, the market will determine the fate of checks as a payment mechanism, but the Federal Reserve can avoid artificially prolonging the decline of checks by rejecting calls to invest in technology that would tend to support continued use of that outdated payment method. Instead, the Federal Reserve should help enable competition within the payments market by supporting the continued evolution of the ACH Network in ways that will make it a better substitute for less efficient check systems.

In this regard, the utility of ACH credits as an alternative to checks can be enhanced to better accommodate reliance on ACH credits in many situations where check use is still significant, such as for bill payments, person-to-person (P2P) payments and business-to-business (B2B) payments. Most importantly, if routing functions are created that allow delivery to a receiver with or without a known account number, then ACH credits would have the same "pay anyone" functionality of checks, with the added benefit of the electronic efficiencies and risk reduction provided by the ACH Network. Moreover, the advantages of ACH credits could be further enhanced through the development of real-time messaging that could allow for faster funds availability under payment system rules, and the implementation of additional daily settlement windows to reduce risk within the system. Thus, the ACH credit could be the "ubiquitous electronic solution" for payments made directly from one DDA to another.

Moreover, ACH credits would have the added advantages of providing a good funds model within the context of robust ACH risk management policies, procedures and systems. We

encourage the Federal Reserve to support the development of one or more routing and account masking directories capable of providing system-wide coverage.

2. *Near-Real-Time Payments*. NACHA fully supports efforts to evolve toward near-real-time payments. However, in discussing the concept of near-real-time payments, it is important to distinguish between real-time or near-real-time transaction messaging, and real-time or near-real-time settlement of funds. It is further important to distinguish whether a near-real-time message is supported by a funds availability requirement, or if the message simply indicates that a payment has been initiated. Finally, it is critical to differentiate those applications of payments technology that call for near-real-time messaging and/or settlement, and those for which value-dated technology provides at least as useful a platform.

For example, real-time transaction messaging already has a substantial market presence in the U.S. through the debit card systems that allow real-time access to transaction account (including prepaid account) information. These systems often provide settlement guarantees that allow for instantaneous completion of transactions based on the expectation of prompt payment. While faster *settlement* of debit card transactions may help reduce risk in these systems, that risk reduction could be achieved via same-day ACH settlement mechanisms.

Similarly, while it is true that real-time transaction messaging and near-real-time settlement can provide distinct advantages for a variety of payments, it would be inappropriate to assume that real-time or near-real-time systems are necessary or desirable for all forms of payment or for all use cases. For example, although there is a role for faster payments in connection with certain types of emergency payroll distributions or bill payments, many other payroll payments, consumer bill payments, and business-to-business payments would seem not to benefit appreciably from being near-real-time. In most such transactions, the counterparties know each other, and payment due dates are established well in advance. These types of payments benefit the most from existing features of the ACH Network – ubiquity among end-users, and efficiency and low cost in processing. Certainly, there are incremental improvements that can continue to be made to serve these payment needs (such as additional daily settlements on the ACH Network), but such improvements should be directly responsive and proportional to specific pain points in these markets.

For those payment use cases that require additional functionality, most of the features described in the Consultation Paper are already available for the ACH Network through Secure Vault Payments (SVP), an existing, real-time, good funds payment messaging system that does not require the receiving party to know the bank account of the paying party. With the SVP model, the payor's financial institution provides additional security and control through authentication and ACH credit origination. Additionally, the payee receives a real-time message confirming the payment, the consumer does not share information with any payee, and settlement follows via a good-funds ACH credit. This is one example of how a real-time messaging can be "layered" onto the ACH Network, meeting end-users' needs without creating a whole new payment system.

The challenge in encourage broader adoption of SVP has not been the functionality of the system, but rather the lack of a critical mass necessary to create a "network effect" among a sufficient number of participants. Creating a network effect while using an opt-in program is very difficult as it becomes a problem of "the chicken or the egg" – merchants wait for

consumers to adopt, while consumer banks wait for merchant adoption. However, systems like SVP exist in other countries, and work has already begun to bridge these systems internationally. Thus, what is needed for a product like SVP is a set of initial incentives to achieve the critical mass that will then enable further self-sustaining growth.

3. *Fragmentation in Payment Innovations.* The fact that many new payment innovations have yet to achieve complete market penetration should not be viewed as a "gap," but rather as the sign of a highly dynamic market in a state of transition. In many cases, it is also a sign of the challenge of gaining ubiquitous adoption or creating a network effect. As competing systems offer different technologies, features, functionality and visions for the future of payments, end users have the flexibility to experiment with different options. Within this constantly evolving market, the Federal Reserve can serve as a catalyst for innovation and cooperation by enabling the dialogue that will help the private sector better identify the advantages and flaws of different models. Moreover, in its capacity as an ACH Operator, the Federal Reserve should support the continued evolution of the ACH Network so that it is fully able to act as the ubiquitous backbone for a wide a range of payment types.

4. *Coverage of "Legacy Payment Systems."* The Consultation Paper describes attributes of payment systems that are increasingly desired by end users and that may be lacking in some legacy payment systems. Any assessment of the Consultation Paper's description in this regard must first address the underlying ambiguity in the reference to "legacy" payment systems. While it is clear that the Federal Reserve considers the check and ACH systems to be core examples of such "legacy" systems, it is less clear what other systems it would include in that category. Are debit card systems, which have their origins in the 1970s, legacy systems for this purpose? If so, then the broad generalizations made by the Consultation Paper do not paint an accurate picture of the diversity that exists among even so-called "legacy" systems. While some of the identified attributes are not currently available in some legacy systems, including the ACH, some or all of those attributes may be available through other systems, such as POS debit cards. Moreover, not all of the listed attributes are necessary for all payment use cases, and the reasons why particular attributes may not yet exist may vary from attribute to attribute and system to system.

The types of payments that would benefit the most from the features identified in gap 4 are payments that consumers initiate directly via their DDAs with their banks – electronic payments to other consumers, and to small businesses and other billers – both online and via mobile devices. There also would be benefit of the features for a variety of "urgent" payments, such as emergency payroll payments due to errors with regular payroll payments, and last-minute bill payments.

Finally, the Federal Reserve should consider that separate challenge of integrating payments, whether legacy or not, with other legacy core banking systems.

5. *Cross-Border Payments.* Although there is significant room for improvement in the efficiency and convenience of cross-border payments, this is largely due to the legal complexities of such transactions, rather than any inherent shortcomings of the existing payment system. Consistency in a payment message formats across geographies does not by itself ensure uniformity in the roles and responsibilities of entities initiating or receiving payments, which comes from rules or regulations of the payment instrument or system. In addition, concerns about money laundering and terrorist financing have resulted in cumbersome policies,

procedures and systems designed to interdict illicit activity. For example, within the U.S. ACH Network, financial institutions have made major investments in infrastructure in order to support the IAT transaction format and rules, and the associated screening obligations required by OFAC. Moreover, well-intentioned but overly burdensome consumer protections, such as the new remittance rule under Regulation E, significantly increase the cost and complexity of supporting consumer cross-border payments. For this reason, the Federal Reserve could play a significant role in improving the efficiency and convenience of such payments if it works in cooperation with private industry to find ways to reduce the regulatory hurdles to such activity.

6. *Mobile Payments.* Mobile payments remain one of the most dynamic areas of payments evolution today. Both technologies and business models continue to evolve as a wide range of players, including banks, processors, technology companies and telecommunications providers vie for a share of the enormous potential of this aspect of the payments market. Mobile payments, therefore, represent an area of tremendous opportunity for enhancement of payment processing.

Although the Consultation Paper notes with some concern the manner of selection of the applicable payment vehicle used within various digital wallet technologies, such processes may vary from application to application. If some services establish a default setting during the set-up phase to make payments more convenient for consumers, that should not be viewed as a "gap" that reduces visibility or payment choice. To the contrary, consumers may want all payments through a wallet to be charged to a particular card account with a particular rewards feature, or to a particular bank account, and may view a requirement to re-select a payment method each time a payment is made as unnecessary transaction friction. In short, this is the type of feature that needs to play out in the marketplace as consumers indicate with their personal choices whether they value the level of convenience offered by any particular service.

As in other areas of emerging payments, the Federal Reserve should continue to promote industry dialogue on important issues affecting the development and integration of mobile payment systems, should help identify risks (particularly those that arise in systems operated by nonbank entities that may not be as attentive as banks to operational issues critical to the integrity of the system), and should support the ongoing evolution of the ACH Network as a ubiquitous backbone for payments. For example, it is easily conceivable that a service like SVP can be used today for certain types of mobile payments, and could be adapted for many others. Since most mobile wallet and related services are effectively interfaces to other payments infrastructure, it is important that the ACH infrastructure continue to evolve in ways that make that infrastructure most useful to emerging payment services, such as by implementing additional daily settlement windows.

7. *Business Remittance Systems.* The ability to engage in "straight through processing" (STP), whereby payments messages are fully integrated into other corporate accounting systems, is an important area for creating efficiencies in payment processing. It also is an area where a ubiquitous payment system offers a distinct advantage, since each integration that requires accommodation to a separate set of interface specifications significantly increases cost to the end user. The ACH Network provides the ability to deliver remittance information that businesses need in a consistent, reliable manner. For example, the adoption of rules for use of XML-formatted remittance in ACH addenda records provides opportunities for the creation of products and services that integrate those messages into other corporate systems.

This is particularly important for small businesses whose internal accounting solutions, systems and processes often have not been scalable to support electronic data interchange and other historical formats for remittance and related data communication. Small businesses also do not have the resources and expertise to perform such integration internally, which has created an opportunity for creating STP integrations on the basis of the specifications provided by payment systems competing for this business. Even larger enterprises that have greater resources and expertise to address the challenges of integrating payment-related information into their more complex systems would benefit from simpler and more flexible data exchange mechanisms like the use of XML formatted addenda records. Thus, Federal Reserve support of standardization efforts through common ACH formats and industry forums would enhance the ability of private industry to coalesce around solutions that are most likely to achieve ubiquity.

8. *Payment Security.* Consumer concerns about the security of electronic payments may inhibit the adoption of certain payment products, but that is not necessarily a bad thing if it occurs. Consumer confidence and trust is a hard-earned commodity and can be too easily squandered by ill-advised risk-taking in efforts to keep up with ever-accelerating technology developments. If consumers look to their banks as the providers they most trust to both hold and move their money, that will help ensure a more prudent growth cycle in secure payment services.

For example, consumers participating in SVP focus groups embraced the security features of SVP. In particular, consumers were attracted to the ability to use their familiar online bank account sign-in process to make payments in the secure and convenient bank-centric environment that they trust. They also appreciated the ability to initiate payment via a push transaction (ACH credit) without having to give their account information away to a payee to pull the payment from their account.

Unfortunately, however, features such as ease of use and convenience will often trump consumer fears, real or perceived, about security. Consumers routinely give out their bank account and routing number, along with their name and address, every time they write a check – which is much more information than normally flows with an ACH transaction. Consumers can also be lulled into a false sense of security by "the next big thing" in payments without properly focusing on whether the provider is the same type of highly regulated entity that historically has protected their funds. Indeed, a failure of consumers to be sufficiently discerning of the different risk profiles of different types of nonbank service providers may be a greater risk to the future of a safe and secure payments infrastructure than lack of willingness to adopt new technologies.

We therefore believe that the Federal Reserve has a critical role to play as a focal point for addressing concerns regarding the safety, security and integrity of payments, for sharing factual information regarding best practices and for supporting industry efforts to establish appropriate security standards. For example, since virtually all reputable research and studies conclude that electronic payments are safer and more secure than paper-based payments, the Federal Reserve can be a leader in communicating this reality to the broad marketplace of payment system users and supporting developments that help avoid artificially prolonging the life of less secure paper-based systems.

Q2. Are you in general agreement with the desired outcomes for payment system improvements over the next 10 years?

Broadly speaking, the desired outcomes articulated by the Consultation Paper reflect an evolution of the industry that certainly would be beneficial over the next 10 years, if not sooner. As outlined in our cover letter, the objectives of NACHA's ACH Blueprint, which outlines a vision for the future of the ACH Network, is in substantial alignment with the Federal Reserve's desired outcomes for the improvement of the payments system, as demonstrated in this table:

Alignment of Federal Reserve Consultation Paper Payment System Gaps and Opportunities and ACH Blueprint Attributes

Payment System Gaps & Opportunities (per Fed presentation)	ACH Blueprint Attributes
Continued End-user Check Writing	Ubiquitous ACH Credits / Routing Data Validation / Remittance Data
Challenges in Converting Businesses to Electronics	ACH Credits / Routing Data Validation / Remittance Data
Closed Payment Communities	Innovation via Ubiquity of ACH Network
Lack of Contemporary Features in Traditional Payment Channels	Innovation / User Enablement / ACH Credits / Faster Payments / Routing Data Validation
Slowness of U.S. Payments	Faster Payments and Real-Time Messages
Mobile Technology Revolution	Innovation / User Enablement / ACH Credits
Obstacles in International Payments	Cross-border Interoperability / ACH Credits / Remittance Data
Security Concerns	Routing Data Validation / ACH Credits

We reiterate that the desired outcome #2 is desirable for certain segments of retail payment needs (e.g., P2P, mobile, small business, and some bill payments), but likely is not necessary for a significant volume of payroll, bill payments, and B2B payments. Careful consideration should be given as to whether broadly applying this desired outcome across all payments would lead to an increase in the societal cost of payments, and whether this is desirable for use-cases that would not appreciably benefit from the stated outcome. Use cases should be developed to determine what is needed to eliminate specific barriers or pain points – and to determine whether incremental enhancements can create the right solutions. Efficiency can be measured in a number of different ways, and it is important to focus on empirical data versus broad generalities.

Q3. In what ways should the Federal Reserve Banks help improve the payment system as an operator, leader, and/or catalyst?

NACHA thinks that the Federal Reserve can take steps in each of these capacities that would be useful in promoting the continued evolution of the U.S. payment system. For example, the

Federal Reserve can act as a catalyst for important payments enhancements by performing and sharing research, such as the detailed research that went into the preparation of the Consultation Paper, that provides empirical support for perceived business needs. Such detailed information, together with the Federal Reserve's analysis, will enable industry stakeholders to better understand the need for resource investments. As identified elsewhere in this response, the Federal Reserve also can help shape and promote industry dialogue by hosting and participating in meetings, seminars, workshops and related efforts to identify and socialize key risks, opportunities, goals and strategies.

The Federal Reserve also can act as both a leader and a catalyst by signaling support for industry-led initiatives. For example, NACHA undertakes many initiatives for the general benefit of the common ACH Network, allowing each potential participant to make its own business case for participating in the initiative. In undertaking such initiatives, NACHA broadly solicits and assimilates input from all sectors of the industry and all types of organizations. Through an extensive set of work groups and committees, as well as broader information gathering and notice and comment practices, NACHA is constantly taking the pulse of the participants in the ACH Network to help gauge their needs. Through such efforts, NACHA has developed some innovative, optional services such as EBIDS and SVP, which each provide unique opportunities for meeting those needs. However, these services continue to suffer from the chicken-or-the-egg problem in generating sufficient interest to reach an ignition level after which growth in participation will become self-sustaining through the network effects of ever larger user bases. Therefore, we encourage the Federal Reserve to signal its support for industry-led initiatives such as these.

The Federal Reserve also can be a catalyst for network innovation simply by accommodating experimentation by private industry, including in the business models used to launch new services. As discussed elsewhere in this response, evolution of the payments system occurs when there are sufficient business cases justifying that evolution. Achieving that type of outcome may sometimes require financial models that have not historically been used in the ACH Network and other legacy systems, but which now may be necessary to create the incentives for new levels of investment by the private sector.

In its capacity as an ACH Operator, the Federal Reserve has the ability to provide new tools and infrastructure that will support private sector implementation of new products and services built on that infrastructure. As Operator, the Federal Reserve can also work to minimize implementation requirements and costs across all financial institutions so as to ease the process of adoption by the industry. The more that certain functionality and infrastructure features are provided centrally, the more the industry can reduce their implementation costs and the more likely it is that the network will achieve broad systemic adoption. For example, the Federal Reserve is in a unique position to act as a catalyst for the adoption of necessary interbank infrastructure to support the creation of routing directories (or a bridge between various routing directories) and messaging services to be used in connection with ACH credits.

As the fiscal agent for the Federal government, which is the largest user of the ACH Network, and perhaps all payments services, the Federal Reserve is in a position to drive adoption of innovative payment services and functionality through adoption by the Federal government. As many of these services succeed or fail based on the network effect, a commitment to participate

from the Federal government could enable at least some of these innovations to achieve a network effect.

Finally, to support a 21st century payment system, the Federal Reserve could expand the opening hours of the National Settlement Service to support daily settlement activity with longer opening hours, ideally on a near 24x7 schedule, even on weekends and holidays.

Q4. In discussions with industry participants, some have stated that implementing a system for near-real-time payments with the features described in the second desired outcome (ubiquitous participation; sender doesn't need to know the bank account number of the recipient; confirmation of good funds is made at the initiation of the payment; sender and receiver receive timely notification that the payment has been made; funds debited from the payer and made available in near real time to the payee) will require coordinated action by a public authority or industry group. Others have stated that current payment services are evolving toward this outcome and no special action by a public authority or industry group is required. Which of these perspectives is more accurate, and why?

Coordinated action by a public authority or an industry group(s) are two very different things. In either case, for a system to be ubiquitous or interoperable, there will need to be coordination to address business rules, participant responsibilities, and minimum system and data requirements.

As stated in our cover letter, NACHA commends the Federal Reserve for initiating this dialogue within the payments industry. We offer to work hand-in-hand with the Federal Reserve to further define the intersection between the gaps and opportunities identified in the Consultation Paper and the attributes of the future ACH Network outlined in the ACH Blueprint, and to continue in our role helping the industry develop rules and standards for payment systems.

Q5. The second desired outcome articulates features that are desirable for a near-real-time payments system. They include:

a. Ubiquitous participation
b. Sender doesn't need to know the bank account number of the recipient
c. Confirmation of good funds is made at the initiation of the payment
d. Sender and receiver receive timely notification that the payment has been made
e. Funds debited from the payer and made available in near-real time to the payee

i. Do you agree that these are important features of a U.S. near-real-time system? Please explain, if desired.
ii. What other characteristics or features are important for a U.S. near-real-time system?

While these features generally are desirable, it should not be assumed that 1) all payments in the U.S. need these features; or 2) that an entirely new system infrastructure is necessary to accomplish this. As we have discussed elsewhere in our letter and our responses to these questions, many existing payment needs are reasonably well-served by existing payment systems, and many could be improved with incremental changes to the payment system rather

than massive restructuring. Other emerging payment areas would likely benefit more from these stated features of a near-real-time system.

Before proceeding with a near-real-time system, the industry should clearly articulate and differentiate use-cases in which near-real-time payments are desirable and necessary, those in which near-real-time information/notification about the payment will suffice, and those for which near-real-time features are not necessary and would only add to costs. It is also important to articulate when faster funds availability is required or desirable.

Real-time messaging systems and directories can be layered onto existing infrastructure without creating an entirely new payment system. This has already been done in opt-in programs such as Secure Vault Payments and EBIDS on the ACH Network. Additional daily interbank settlement could then be added to reduce risk in the system.

This suggests that a "modular" approach can be taken in adding functionality that can be layered upon existing systems, which then could be leveraged by new payment services as appropriate. This would allow the industry to begin work to develop functionality (for example, a directory) that could be used by all to help existing as well as new payment types

Q6. Near-real-time payments with the features described in the second desired outcome could be provided several different ways. What would be the most effective way?

Two or more of the ways outlined in this paper need not be mutually exclusive. NACHA thinks that enhancing the ACH Network to improve the speed of interbank settlement (by adding one or more daily settlement windows) and also enhancing ACH credit features with ubiquitous routing capability and near-real-time messaging is a feasible and viable approach. This could be one of several approaches, such as interoperability among numerous proprietary networks, or enhancing debit card networks.

While there is something attractive about the idea of building a wholly new system – for instance a new system would not be hampered by the legacy infrastructure of the old payment system (but would still be subject to legacy core processing systems of financial institutions) – a new payment system would also require a great deal more investment on behalf of all in a time of constrained resources. Before any decisions are made about building new systems or functionality, a true business requirements phase is critical to outline common needs, capabilities, and costs, and how all financial institutions and their customers would be affected. Before making broad design decisions, a business requirements phase would consider: 1) resource availability; 2) functions by user needs; and 3) the feasibility of building "modularly" (i.e., pieces of functionality such as directory services that could be built today that potentially can be leveraged by multiple existing payment systems).

As an example, as noted previously, Secure Vault Payments is a rules-based and flexible messaging system that puts users in control and allows financial institutions flexibility in risk management and processing. It includes appropriate benefits and incentives for participants, and "rides on top" of an existing payments system (i.e. the ACH Network). When considering lessons learned from Secure Vault Payments, NACHA envisions an enhanced payments infrastructure that is central to financial institutions for consumer and business credit payments, and includes: 1) financial institution authentication, authorization and risk management; 2) real-

time and/or near-real-time messaging; 3) additional daily interbank settlements; 4) standardized formats for payment and remittance; 5) privacy of payer and payee banking information; and 6) utilizing the existing ACH Network for moving funds and payment remittance information.

In addition to an enhanced, ubiquitous ACH credit capability, the debit card systems might also facilitate many of the needs of a near real-time payment messaging system. We note again that debit card systems generally work by providing merchants with a real-time message, followed by the settlement of funds via ACH typically in 1-2 business days. This is an excellent example in differentiating the functionality of a real-time message from real-time or near-real-time movement of funds. We again emphasize the need to differentiate between near-real-time payments (for which we assume the Federal Reserve means the movement of funds with interbank settlement) and real-time messages about payments, either with or without funds availability requirements. Any decisions on building new payment system functions or features should clearly articulate these differences and how they apply to specific use-cases.

Q7. Some industry participants have said that efforts to make check payments easier to use, such as by enabling fully electronic payment orders and/or by speeding up electronic check return information, will incrementally benefit the payment system. Others argue the resources needed to implement these efforts will delay a shift to near-real-time payments, which will ultimately be more beneficial to the payment system. Which of these perspectives do you agree with, and why?

NACHA strongly believes that continuing to invest in check-based technology not only will "delay a shift in near real time payments," but also will divert needed resources from enhancing other native electronic payment systems, like the ACH, that are still growing and expanding into new uses. Banks and system operators alike have limited resources to commit to new technology initiatives, so funding should be directed toward those developments that are most likely to produce enduring improvements in the speed, security, integrity and flexibility of electronic payment systems. Putting more investments into a declining system with limited future prospects and no international interoperability (and which would likely require changes to the law to be fully realized) would almost certain detract from other investments in electronic payments infrastructure that could address many of the same payments needs, but in a more secure, reliable and enduring manner.

For example, enhancements to the ACH Network such as multiple daily settlement windows or a routing directory for ACH credits would create attributes desired by those that continue to write checks. The Federal Reserve could also remove barriers to moving checks more efficiently through the ACH Network by permitting all financial institutions to clear checks electronically from the point of deposit. NACHA's Deposited Check Truncation (DCT) program provides the opportunity to remove more checks from the check clearing system if it is adopted as a NACHA rule, like other existing check conversion codes. The Federal Reserve should collaborate with the NACHA membership on a rule broadly implementing DCT as a ubiquitous capability without an opt-out feature. Moreover, once the ACH Network is able to move in that direction, expansion of the DCT could be considered to enable electronification of additional items beyond low dollar consumer deposits. Ultimately, as check volume continues to decline, the remaining checks can be cleared cost-effectively using existing ACH infrastructure without making additional investments in an outmoded form of payment that would reduce the resources available for more productive payments initiatives.

Q8. How will near-real-time payments affect fraud issues that exist with today's payment systems, if at all?

i. Will near-real-time payments create new fraud risks? If yes, please elaborate on those risks

Any system of near-real-time payments, or alternatively, funds availability based on receipt of real-time message, will generate concerns about fraud and risk management. Customer authentication will need to be more robust, as originating banks will have little opportunity to review payment instructions before executing the instructions. Receiving banks will also have little opportunity to review suspicious activity before making funds available and enabling those funds to be withdrawn. In this regard, U.S. payment system stakeholders should be able to learn from other countries that have already implemented these capabilities. For example, in such other countries, near-real-time and real-time transactions are generally limited to relatively low-dollar credit transfers. From policy and regulatory perspectives, such a system would need to establish consistent and acceptable levels of authentication and security for the good of the entire system, and should not be left vulnerable to the weakest link.

Q9. To what extent would a ubiquitous near-real-time system bring about pivotal change to mobile payments?

While many front-end "mobile payment" solutions are emerging in the marketplace, from the perspective of the payments system, "ubiquitous" is a key word in this question. NACHA's vision of the ACH Network as outlined in the ACH Blueprint, and as described elsewhere in our responses, includes the capability for consumers and businesses to initiate ACH credit "push" transactions from their deposit accounts with their financial institutions. Such a capability could be leveraged to provide mobile access to those accounts. While each financial institution can makes its own decisions about the products it offers to its own customers, the ACH infrastructure can support a "pay anyone" capability that will enable a broad range of mobile and other emerging payments; i.e., the ability to route a good-funds ACH credit push transaction to any other customer with a deposit account at any other financial institutions. For example, ubiquitous, mobile version of Secure Vault Payments, which already incorporate near-real-time transaction messaging, could fill the needs many mobile payment use cases, with or without faster back-end settlement.

Q10. What would be the implication if the industry and/or the Federal Reserve Banks do not take any action to implement faster payments?

i. What is the cost, including the opportunity cost, of not implementing faster payments in the United States?

As described above, the Federal Reserve has an important role to play in helping move the industry toward faster payments. This is especially true in the ACH Network, where the Federal Reserve has a critical role to play as ACH Operator, in addition to the other roles of educator, leader and catalyst described elsewhere in this response. Nonetheless, regardless of whether the Federal Reserve is active in the movement toward faster payments, the industry will continue to develop solutions in response to market needs. However, the nature and scope of those

innovations may be very much affected by the action or inaction of the Federal Reserve and other interbank system operators.

Competition from the banking sector itself may be most impacted by the inaction of the Federal Reserve to accommodate faster payments by banks. This is because solutions emanating from the banking sector often are more tied to Federal Reserve infrastructure and/or oversight and therefore may be slower in coming and/or more fragmented without Federal Reserve cooperation.

This is particularly important in the ACH environment where some level of coordination between the ACH Operators is critical for the creation of ubiquitous solutions. ACH Operator support is needed in the ACH environment so that private industry innovation can thrive utilizing an enhanced ACH infrastructure. If those enhancements are not available through the ACH Operators, the industry will inevitably move toward proprietary, closed-loop and non-ubiquitous systems. The "opportunity cost" of such fragmentation of existing ACH ubiquity is a loss of transparency, an increase in risk through loss of the centralized risk management functions that are available within the ACH today, and higher per-unit costs for those that are not included in proprietary or closed-loop systems. Risk may be further increased to the extent that impediments to enhancement of bank-run systems like the ACH result in commerce moving to non-bank payments providers that are not subject to the same oversight and controls as bank systems.

Q11. To what extent will the industry need to modernize core processing and other backend systems to support near-real-time payments?

NACHA's understanding is that, to a large extent, financial institutions would have to modernize core processing and back-end systems to support near-time-time payments. Posting transactions and making funds available in near-real-time would require significant infrastructure change not only to bank core processing, but also to online/mobile banking, treasury management and other system interfaces. Other countries that have implemented real-time messaging systems report that the vast majority of their costs were incurred creating the functionality to post payments and integrate with the core bank processing systems.

Most systems used by financial institutions throughout their enterprise are based on older architectures that are less flexible and more costly to change, as well as very difficult and expensive to replace. This is compounded by a heavy reliance on vendors for transaction processing and core banking systems, with their own upgrade schedules and pricing/contract considerations.

Q12. Some industry participants suggest that a new, centralized directory containing account numbers and routing information for businesses and/or consumers, to which every bank and other service providers are linked, will enable more electronic payments. A sender using this directory would not need to know the account or routing information of the receiver.

A universal routing capability is essential for enabling a ubiquitous system of electronic credit transfers that offers superior features to checks in cases where they are still predominantly used – P2P and B2B payments most specifically. Whether such a directory uses a centralized or decentralized model, and the specific data it contains, are open design questions that are still to

be determined through industry collaboration. A directory designed to facilitate routing of credit transfers would benefit today's payment system end users, and could be designed to interface with future enhancements to the payments systems, thereby allowing for incremental investments over time with greater surety of a positive return on the investment. The time seems right for the industry to identify specific use cases in which to test a payments routing directory. We encourage the Federal Reserve to engage in such industry collaboration to test a payments routing directory for an industry-supported use case.

Q13. Some industry participants say that check use is an enduring part of the U.S. payment system and that moving away from checks more aggressively would be too disruptive for certain end users.

- **i. Is accelerated migration from checks to electronic payment methods a high-priority desired outcome for the U.S. payment system? (Accelerated means faster than the current trend of gradual migration.)**
- **ii. Please explain, if desired.**
- iii. **If yes, should the Federal Reserve Banks establish a target for the percent of noncash payments to be initiated via electronic means, by a specific date? For example: "By the year 2018, 95% of all noncash payments will be made via electronic means."**

Accelerated migration from checks to electronic payments is a desired outcome since legacy check systems are less efficient, more risky and offer fewer opportunities for integration of payments with other commercial systems. This outcome should be driven by creating solutions that allow end users better alternatives to the check rather than by establishing a specific target by a specific date. The focus should be on creating the tools and infrastructure required to replace checks, while adding additional value to participants. There are defined niches were check usage is still prominent – for instance P2P payments, bill payment and B2B payments - and solutions can be created to not only replace checks in these niches, but also provide end-users more value. The industry goal in this regard is not just to provide an electronic equivalent to the check in order to reduce cost, but to provide a better overall solution that enables further product development and innovation and better risk management.

For example, the EBIDS service within the ACH can provide the catalyst to move more bill payment transactions to the electronic environment in a manner that improves the overall experience for both billers and payors. EBIDS allows bill data to flow through the ACH Network and be delivered to the consumer by the consumer's bank. The biller does not have to mail a bill and the consumer can easily click through the bill summary to see the bill detail. The consumer's bank then sends the payment electronically, without having to cut a demand draft to send to any of the thousands of billers for which electronic routing may not have been otherwise available in existing bill payment services. Additionally, if EBIDS is being used, a consumer does not have to share his/her account number, and a good-funds ACH credit will be used to make the payment. The business biller benefits from exception-free posting of the payments, because all required information flows directly with the ACH credit. Thus, this type of solution does much more than just replace the check – it adds value to all the participants in the transaction. By supporting EBIDS and the PayOnly Directory in its role as service provider, the Federal Reserve would significantly improve the incentive and ability of financial institutions to participate.

As another example, check use for P2P transactions can be dramatically reduced if electronic P2P services offered greater ubiquity. In the absence of a single directory that would permit direction of ACH credits without the task of identifying account information, the P2P infrastructure within the banking industry could be significantly improved by creating interoperability between individual P2P database solutions, thereby removing the current barrier of consumers having to enroll in multiple services. This would allow for much greater "reach" in the quest of universality (i.e., the ability to pay anyone), and would allow consumers to enroll with only one party.

Finally, some of the persistence of residual check usage may be driven by practices and/or requirements that inadvertently encourage check usage to the detriment of electronic alternatives. For example, because Regulation E authorization and dispute resolution requirements do not apply to remotely created checks (RCCs), some merchants and billers prefer to use RCCs for consumer payments to avoid the costs of Regulation E compliance. Financial institutions also may inadvertently encourage check usage by providing same-day availability on image cash letters, but not on ACH debit files. Better education of small businesses as to the utility and cost-effectiveness of ACH credits could also help counter the natural tendency of small business to make check payments when they are given a checkbook at account opening.

Q14. Business-to-business payments have remained largely paper-based due to difficulties with handling remittance information. Consumer bill payments also are heavily paper-based due to the lack of comfort some consumers have with electronic alternatives. In addition, many small businesses have not adopted ACH for recurring payments due to technical challenges and/or cost constraints. The payment industry has multiple efforts underway to address these issues.

i. To what extent are these efforts resulting in migration from checks to other payment types?
ii. What other barriers need to be addressed to accelerate migration of these payments?
iii. What other tactics, including incentives, will effectively persuade businesses and consumers to migrate to electronic payments?
iv. Which industry bodies should be responsible for developing and/or implementing these tactics?

Continued migration of the remaining pockets of paper-based payment activity is a core element of NACHA's vision for the future of the ACH Network as outlined in the ACH Blueprint. The Federal Reserve's own research and statistics show that check payments continue to decline as a proportion of overall payment activity within the U.S. In our cover letter and answers to earlier questions, we identify many of the reasons for the persistence of checks for various use cases and the steps that are being, and could be, taken to help accelerate their replacement with electronic alternatives. We offer some additional thoughts below, which should be considered in concert with our other responses.

In the consumer environment, generational shifts will accelerate the movement toward electronic payments. Younger payers not only are more comfortable with electronic payment experiences but have strong preferences for electronic payment methods. Consumer bill payment experiences can be improved through services like EBIDS that help enable "push" transactions

that provide the greatest consumer comfort regarding the safety and security of payment and enable simple payment and information flows within a controlled setting. A more complete migration, however, of P2P payments from check will come only when a more ubiquitous solution is available that mimics the "pay anyone" features of a check in the electronic environment. Corporate payments suffer from some of the same challenges, but have the added element that integration of remittance information with the payment is necessary to provide the kind of complete end-to-end solution that will drive business toward fuller electronification of payments.

Broadly speaking, the types of continuing innovation, education and coordination necessary for the on-going evolution of the payments system, particularly the ACH Network, require the input and efforts of a wide range of industry players, including banks, associations such as NACHA and regional payments associations, ACH Operators and federal regulators. NACHA has already taken a lead in attempting to find solutions that provide better alternatives to checks, including EBIDS, XML-formatted addenda records and efforts to enable same-day ACH settlement. As explained throughout this response, the Federal Reserve also plays a critical role in this effort. Federal Reserve support and cooperation is essential to leveraging the ACH Network as a core ubiquitous payments platform that enables new payment applications in the 21st Century.

Incentives for replacement of paper with electronics, however, ultimately come down to the features, functionality and business case that banks can offer to their customers, which in turn are influenced by the business cases available to those institutions. If banks are asked to make investments to accelerate the replacement of checks, they need to be educated as to why that replacement will reduce their costs, ameliorate risks, improve their customer retention, and/or provide new revenue opportunities. The easier it is for banks to access a ubiquitous payment solution themselves, the easier it will be for them to incorporate that solution into their product offerings.

Q15. To what extent would the broader adoption of the XML-based ISO 20022 payment message standards in the United States facilitate electronification of business payments and/or cross-border payments?

The industry, including the Federal Reserve, is currently investigating the business case for the U.S. to adopt ISO 20022-compliant payment message standards into the domestic payment formats. We can't speculate about the results and the cost/benefit assessment until that work effort is completed. In the interim, many financial institutions provide translation services that map ISO-compliant messages to the domestic payment system formats. Unlike many other countries, the United States has already developed and utilizes information-rich payment formats. This capability provides U.S. businesses with the opportunity to benefit from electronification of payments and information; but this rich capability may also limit full interoperability of cross-border payments and information. Despite the challenge of facilitating full cross-border information, standards such as ISO 20022 provide the potential to more consistently format basic required payment information, helping to facilitate global commerce.

Separately, the industry has also developed, and submitted for ISO consideration, a stand-alone ISO 20022-compliant payment remittance specification that would enable greater integration with businesses' internal accounting systems. NACHA intends to develop a rules proposal to permit this ISO 20022 remittance specification to be carried with an ACH CTX payment, should

the specification be approved by ISO. Even if this effort is successful domestically, there is no certainty that the specification could be utilized to serve the cross-border payment market. OFAC requirements for screening cross-border payments ***and*** all associated remittance information limits that ability to implement such a function across the entire domestic payment system.

Q16. What strategies and tactics do you think will help move the industry toward desired outcome four - consumers and businesses have greater choice in making convenient, cost-effective, and timely cross-border payments?

The new remittance rule adopted pursuant to Section 1073 of the Dodd-Frank Act, while well intentioned, has impeded the development of more convenient and cost-effective cross-border payment mechanisms. Although the Consumer Financial Protection Bureau (CFPB) (and the Federal Reserve before it), made efforts to address the differences between open systems like wire transfer and ACH and a traditional closed remittance service model, the rule remains a poor fit for open systems. The Federal Reserve and CFPB should work with Congress to amend Section 1073 in ways that eliminate some of its most onerous features and provide more flexibility to accommodate open network remittance models.

The Federal Reserve also should continue expanding the geographic reach of the FedGlobal service to enable the use of the ACH system as a mechanism for international payments for both consumers and businesses.

Q19. What future payment standards would materially improve payment security?

NACHA doesn't have a response with respect to identifying a specific payment standard(s), but would note generally that identifying a standard is only one part of a solution. Business rules to define roles, responsibilities and liabilities are just as important.

Q21. Please share any additional perspectives on U.S. payment system improvements.

A function that is closely related to electronic payments is electronic invoicing, or e-invoicing. Those users that have implemented e-invoicing realize significant efficiencies as a result. In the United States, adopting an e-invoicing system, and a country-wide standard for e-invoicing, would yield additional benefits than just moving the payment from paper to electronics. As many other countries have already implemented or are exploring e-invoicing systems, it is an appropriate time to do so in the U.S. As a large user of payment system, the Federal government and the Federal Reserve as its fiscal agent could help to facilitate both the greater adoption of electronic payments and e-invoicing.

NACHA - ACH Blueprint

(*Originally Issued March 2012)*

NACHA Exhibit B

Federal Reserve Public Consultation Paper on

Payment System Improvements

Submitted December 13, 2013

NACHA
The Electronic Payments Association®

NACHA launched the ACH Blueprint initiative to support its long-term strategic goals

- Overall Objective: The ACH Network will continue to be the premier high-volume, value-dated payment system in the US
- To remain relevant, the ACH Network must be capable of supporting new payment applications that respond to evolving market needs
- The ACH Network must also be capable of adapting to the demands of increasing regulation of payment services
- Accordingly, the ACH Network will need to make change easier while creating value for participants

The ACH Blueprint is a roadmap for change

- **Blueprint Process:** Through extensive input from board members, FIs, Operators, end users and others, NACHA has assembled a draft **"ACH Blueprint"**
  - A forward-looking roadmap for the ACH Network, which will propose change-related initiatives that can be planned over the next several years and executed longer-term
- **Blueprint Goal:** The focus of this ACH Blueprint is to facilitate change
  - **Make Change Easier:** To simplify the process and reduce the cost of change for participants in the ACH Network
  - **Create Value from Change:** Overcome some resistance to change by creating value for ACH Network participants
- **Commitment:** NACHA is highly aware that ACH Network changes require continued investment of resources, and is committed to ensuring:
  - **Flexibility:** That the change process is flexible enough to encourage payments innovation and response to regulations without imposing unneeded costs on the system
  - **Responsiveness:** That innovations address end user needs and global competitive circumstances, while also being responsive to regulators as efficiently as possible
  - **Participant Value:** That non-regulatory changes provide opportunities for a balanced approach to deliver value for financial institutions, their customers and network operators
  - **Stability:** That the ACH Network continues to provide ubiquity, reliability and standardization

The ACH network faces a number of impediments to change

Legacy Systems

- **Legacy Systems:** Most systems used by FIs throughout their enterprise are based on older architectures that are less flexible and more costly to change, as well as very difficult and expensive to replace; this is complicated by heavy reliance on vendors (Fiserv/PEP+, FIS) for ACH processing and core banking systems with their own upgrade schedules and pricing/contract considerations

Operational Processes

- **Operational Processes:** Regulatory and other changes often necessitate new procedures (e.g. OFAC screening for IAT, 3rd party KYC), for FIs, operators and supporting applications; in addition, there are often changes in end user operating procedures

Legacy Formats

- **Legacy Formats:** The 94-byte, batch-structured NACHA format was designed at a time of much more limited file size, communication and processing capacity, and did not envision all of the needs for data that newer payment applications require, leading to “force-fit” solutions and workarounds

Resource Priorities

- **Resource Priorities:** FIs and Operators have limited funds and staff for IT development and operational implementation; as a result, IT changes that are not legally mandated or lack substantial revenue or cost benefits fall to the bottom of the project queue or are resourced at minimal levels to meet definitive deadlines

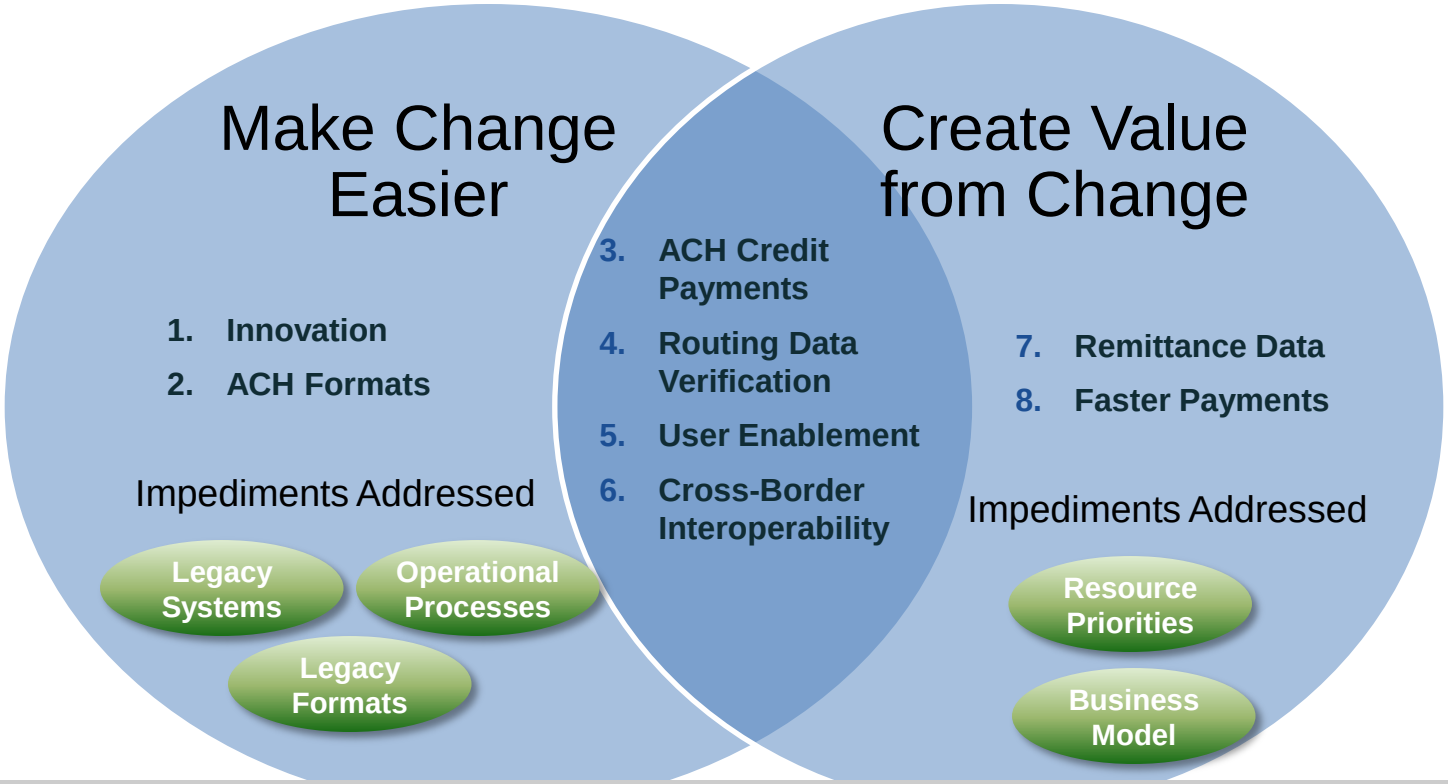
Business Model

- **Business Model:** Changes that impose new costs or diminish the value of existing services, rather than creating new value for all FIs vs. for some FIs may face resistance

NACHA
The Electronic Payments Association®

There are eight areas of opportunity addressed by the ACH Blueprint

Areas of opportunity covered by the ACH Blueprint address the objectives of Making Change Easier, Creating Value From Change, or both



One limitation is that legacy systems and operational processes within FIs are largely outside the control of NACHA and the ACH Network

ACH Blueprint proposals are complementary, jointly supporting a variety of potential initiatives

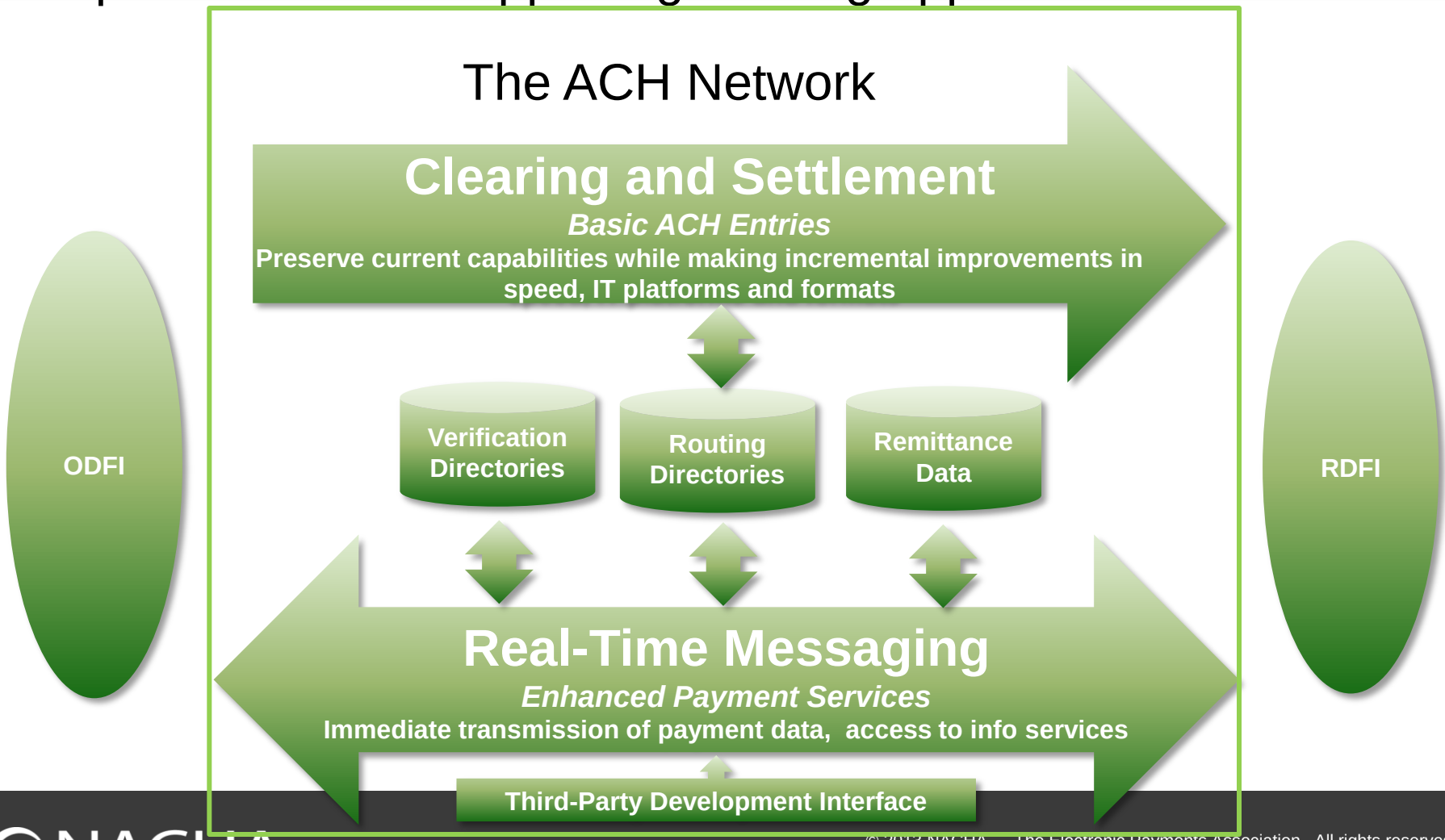
- Most future ACH applications will benefit from multiple elements of the ACH Blueprint
  - Example – Improved options for B2B payments:
    - Remittance Data – to support accounts receivable integration
    - User Enablement – to include small business buyers and suppliers
    - Routing Data Verification – e.g., a B2B Biller Directory
    - ACH Credit Payments – to overcome businesses aversion to Direct Debits
    - ACH Format – to address the “single item batch” issue resulting from current format
    - Cross-Border Payments – to support import/export activity
  - Example – Supporting mobile payments
    - Routing Data Verification – using alias routing to protect account data
    - ACH Credit Payments – enabled by consumers with mobile online capabilities
    - User Enablement – making it easier for consumers to initiate ACH payments
    - Innovation – providing support for leading-edge providers of payment services
    - Faster Payments – supporting the immediate messaging that mobile payments demand

The ACH Blueprint proposals will not compromise core ACH capabilities

- The ACH Blueprint should not result in a diminished ability of the ACH Network to handle mainstream payments such as Direct Deposit, Direct Debit, online bill payments, tax payments and check conversion, which depend on:
  - **Ubiquity** – the ability to reach virtually every financial institution in the US
  - **Reliability** – very little downtime, with minimal delivery failures
  - **Standardization** – unambiguous rules dictating formats, usage and processing
  - **Value-Dating** – allowing the submission of payments ahead of settlement date

- *This baseline functionality will mitigate a barrier to change in that it ensures that existing core products and services will not need to be discontinued or curtailed*

ACH Network will need an architecture that enables new capabilities while supporting existing applications



Proposed Blueprint Opportunities: 1. Innovation

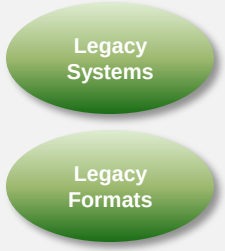
- **Proposal:** Consider opportunities for NACHA to support payments innovation through consultation and collaboration with payments innovators, and through targeted opt-in programs that allow faster implementation of change without sacrificing the underlying ubiquity of the ACH Network
- **Rationale:** Innovation is a type of change that creates unique challenges for the ACH Network. Innovators need expert guidance to most effectively utilize the capabilities of the ACH. Not all participants may be able to implement new payment applications in early stages. By actively supporting and guiding innovation, NACHA can ensure its orderly progress

Impediments Addressed

Proposed Blueprint Opportunities: 2. ACH Formats

- **Proposal:** Address opportunities to change or improve existing formats to better support flexible payment types and remittance, and provide a path for global integration. The evolution of ACH formats should support processing batches of transactions as well as single transaction processing
- **Rationale:** More flexible formats will make it easier to implement new payment applications with different information requirements. New formats may also enable new payment applications

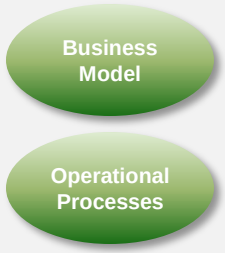
Impediments Addressed



Proposed Blueprint Opportunities: 3. ACH Credit Payments

- **Proposal:** Focus on ACH credit models as the preferred basis for future innovation, while continuing to support debit options for existing or emerging payments as appropriate
- **Rationale:** Credit payments are inherently less risky for both ODFIs and RDFIs, simplifying implementation. There are also fewer exception processes associated with credit payments. New types of credit payments provide opportunities to introduce value-creating services, creating a cost-justification for implementation

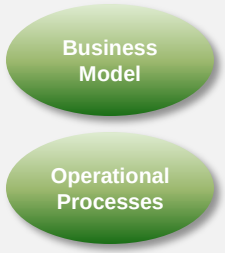
Impediments Addressed



Proposed Blueprint Opportunities: 4. Routing Data Verification

- **Proposal:** Enable Originators or ODFIs to verify routing data as a way to reduce exceptions and facilitate new payment applications, while protecting data privacy and security
- **Rationale:** Routing data validation will provide a means to reduce exceptions, mitigating operational impediments to change. Routing data verification is an enabler of credit payment models, and is a value-added service that may provide business opportunities for ODFIs and RDFIs. Additionally, pseudo-DDA (e.g. alias) routing provides a way to reduce the burden on RDFIs for implementation of new entry types by reducing errors and the need for exception procedures

Impediments Addressed



Proposed Blueprint Opportunities: 5. User Enablement

- **Proposal:** Make it easier for consumers and small business to perform ACH credit origination, and address the risks associated with these payment types.
- **Rationale:** Simpler, more Originator-friendly ACH processes should reduce the cost of ACH operations for financial institutions. A broader base of ACH users, and the opportunities to deploy new payment services should provide an incentive for all financial institutions to support change.

Impediments Addressed

Proposed Blueprint Opportunities: 6. Cross-Border Interoperability

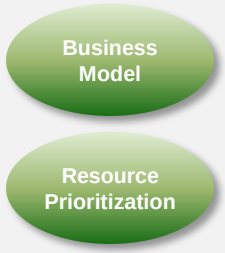
- **Proposal:** Support better integration and interoperability with payment systems in other countries to support more effective cross-border payments
- **Rationale:** As the issues surrounding IAT implementation made evident, international payments present special challenges. Coordination with payment systems in other countries will mitigate the difficulty of implementing change involving payments that cross borders. Cross-border interoperability can also provide opportunities for financial institutions to create new payment services

Impediments Addressed

Proposed Blueprint Opportunities: 7. Remittance Data

- **Proposal:** Address ways to link or embed detailed remittance advices and other supporting data to payments; supporting data may or may not be included in the payment message itself, but in any case should be in a format that is relevant and useful to both senders and receivers, and uniquely linked to a specific payment
- **Rationale:** Supporting enhanced remittance data via ACH will create opportunities for financial institutions to create value-producing payment services. By providing a variety of options for how remittance data can be linked to payments (embedded, hyper-links), a flexible approach can overcome the constraints of legacy formats and legacy systems. Flexibility also mitigates concerns over customer impact because it will be easier to accommodate existing industry-standard formats, and will provide options for existing B2B networks to integrate ACH into their workflows.

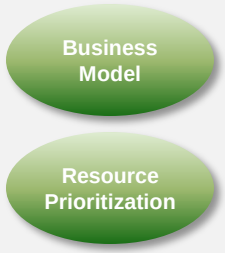
Impediments Addressed



Proposed Blueprint Opportunities: 8. Faster Payments

- **Proposal:** If the ACH network is to support P2P, mobile and other emerging payments, and replace costly cash and checks, it will need to provide near-real time delivery of payment messages (24/7) and more frequent posting/settlement
- **Rationale:** Many future payment applications will be based on networks that provide continuous, immediate communication, so an ACH architecture that incorporates near-real-time messaging will avoid the need for frequent incremental changes in clearing schedules to support increasing demand for immediate payments. Financial institutions will be able to offer customers new products and services that will cost justify their investment in new systems with flexible architectures more adaptable to change

Impediments Addressed



Appendix

Alignment of Federal Reserve Consultation Paper Payment System Gaps and Opportunities and ACH Blueprint Attributes

Alignment of Federal Reserve Consultation Paper Payment System Gaps and Opportunities and ACH Blueprint Attributes

Payment System Gaps and Opportunities	ACH Blueprint Attributes
Continued End-user Check Writing	Ubiquitous ACH Credits / Routing Data Validation / Remittance Data
Challenges in Converting Businesses to Electronics	ACH Credits / Routing Data Validation / Remittance Data
Closed Payment Communities	Innovation via Ubiquity of ACH Network
Lack of Contemporary Features in Traditional Payment Channels	Innovation / User Enablement / ACH Credits / Faster Payments / Routing Data Validation
Slowness of U.S. Payments	Faster Payments and Real-Time Messages
Mobile Technology Revolution	Innovation / User Enablement / ACH Credits
Obstacles in International Payments	Cross-border Interoperability / ACH Credits / Remittance Data
Security Concerns	Routing Data Validation / ACH Credits