



cutting through complexity

U.S. Payment System Improvement

KPMG Response

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Introduction

This document is KPMG's response to the Payment System Improvement Public Consultation Paper, published in September 2013 by The Federal Reserve Banks. As both a stakeholder and partner in U.S. payments, we have reviewed this consultation paper within our organization to answer the key questions that were posed in this consultation paper.

This document represents our response to the consultation paper both in terms of the over-arching questions and the individual questions that invited comment on the Federal Reserve Banks' views on payment system gaps, opportunities and desired outcomes.

General Questions

1. Are you in general agreement with the payment system gaps and opportunities identified? Please explain, if desired.

In common with many developed economies, the payment mechanisms in the U.S. market that achieve reach to all participants are systems that were largely designed prior to the advent of the internet and digital economy. The increasingly global nature of business and pace of innovation has also led to greater expectation of innovation within the payment systems.

We agree that the gaps identified exist and that there are a number of ways that they could be addressed. Some of the opportunities for improvement are well documented and have been known within discrete sectors for many years. The gap in addressing these issues in a coherent framework has created space for many new players to provide enhanced customer functionality and in some cases to extract profit from the friction that exists in the payment systems at the cost of the consumer, business or the retailer.

This consultation brings together a holistic view for the industry that crosses the retail, business and government domains and addresses the core issue – whether the underlying infrastructure could be enhanced to provide an improved capability that would have potential benefit for many, and a new platform to encourage both collaborative and competitive innovation. Any change will impact the current construct of the eco-system and may dislodge inefficient processes, but in doing so, creates a new cost and pricing environment, where the complexity of costs borne by suppliers are often not explicitly charged to the beneficiary in a transparent way.

Payments are the result of trade and commerce and have long been associated as a cost of doing business. Users of these systems pay for the payments services in a variety of mechanisms, whether via float, deposit interest forgone, explicit charges and/or commissions. In effecting change in the ecosystem, the notion of payments as a cost centered or profit centered function needs to be addressed.

We believe that it is possible that the most pragmatic solution is a new infrastructure where all organizations participating in clearing and settlement need to be able to receive faster payments and apply funds, but that customers either explicitly pay a fee to send money quicker, or to receive it quicker (as defined by their service provider). While the sender is often the one choosing the service, the receiver of funds is typically the one who disproportionately gains most from the speed of the transaction and any improvement in the reconciliation of data. Such a model would self determine the speed of overall migration to a faster payments environment and allow for innovation that can be self funding in the longer term.

i. What other gaps or opportunities not mentioned in the paper could be addressed to make improvements to the U.S. payment systems?

Speed, certainty and identity.

We believe that three core challenges are driving change in payment systems globally. One is speed – the move to near real-time systems, another is certainty – the assurance that the payment has reached the correct beneficiary in the expected timeframe, and lastly, identity – that the payment was made and received by correctly identified parties. Additional attributes we would like to see include richer data, fraud reduction and risk reduction.

Access, education; awareness and financial literacy are ongoing challenges. The financial community has an obligation to explain and articulate the benefits of products and services in a more meaningful way to the wider community. The pricing of payments is not transparent and cross subsidization of certain products may skew usage of products and services that are not aligned with the direction of

the national payment strategy. The Federal Reserve has a key role in raising awareness, education and pursuing public policy objectives related to the safety and soundness of the payment system and the development of products and services that are appropriate for users.

Outcomes for payment system improvement.

2. Are you in general agreement with the desired outcomes for payment system improvements over the next 10 years? Please explain, if desired.

Yes. We believe a delay will impact the competitiveness of the US banking market.

- i. What other outcomes should be pursued?

Business payments are the area where most cost and pain is borne by the economy. An improvement in the payment system should be focused on volumetrics and target reduction in friction for corporate and small businesses. Small businesses drive the economy, so the additional value this brings to the creation of new jobs and opportunity to grow wealth in the economy is of disproportionate value.

The role of the Federal Reserve Banks.

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

We believe that it is important to draw a distinction between the three roles the Federal Reserve Banks play in the payment eco-system, as regulator, operator and participant in the payment system.

In each of these three roles, we believe the Federal Reserve Banks have an opportunity to lead the debate and delivery of (a) solution(s) to close some of the identified gaps.

The absence of a national Payment Systems Board (or equivalent) is an identified gap in the governance model for the US payment system. Such an organization comprised of representatives from the Federal Reserve Banks, commercial banks, credit unions/savings & loan organizations, consumer representatives and public interest organizations, could assume responsibility for the creation a national payments strategy and plan. This in turn would articulate a coherent innovation strategy for the US payments market, and allow organizations to invest and innovate.

We believe that industry and consumer groups need to have more of a say in the development of new products and services. It is not evident that there is a permanent method in place to capture these requirements on an ongoing basis. The Federal Reserve Banks could bridge that disconnect. This model appears to work well in other major jurisdictions.

Ubiquitous Near-Real-Time Payments

Is intervention required to advance a real time payment system in the U.S.?

4. 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.

i. Which of these perspectives is more accurate, and why?

We believe co-ordinated action is required, whether that is initiated by a public authority or industry group. Payments are a network service and current projects are typically closed loop. Broader access to convenient payment systems should assist economic growth and the development of small business and innovation.

The absence of reach across the network prevents ubiquity and drives up the overall cost of interoperability. This is the reason the existing networks for ACH and wire exist today. We need to revisit the overall business case for those models compared to the cost to the industry of a myriad of discrete projects. The current lack of progress invites third parties to intermeditate in the payment processing environment where they can profit from the friction in payments. These third parties are often agile and innovative, but sometimes lack the security and risk frameworks of incumbent providers.

Typically an objective needs to be articulated and set. The industry can then respond to develop a comprehensive response, appropriate to the varied needs and objectives of the stakeholders within what is a competitive banking industry. The industry needs to agree where collaboration is appropriate and where competition exists outside that boundary. The Federal Reserve within its remit as a regulator can monitor progress, as an operator may be intrinsically involved with the stakeholders in designing solutions; and as a user of the products and services can contribute to the overall requirements definition.

ii. What other perspective(s) should be considered?

We believe that the development of a new payment system that relies entirely on electronic means needs to also incorporate the needs of a wider group within the economy. In particular, the requirements of the elderly, infirm, vulnerable members of society and the unbanked need to be addressed. In an era where we are facing increasing decline in mental health in old age, we need to be able to create solutions to address challenges these groups present.

In addition, some thought needs to be given to the role of checks and cash in society in terms of ubiquity. The development of options that model the ease of current products for the end user should be a priority. While this is within the competitive domain, the design of core capability can assist the roll out of such solutions.

Features of a real time system

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

We believe that a,c,d,e above are the ideal core attributes of a real time system. The outcome b – for an addressing service or proxy service is a further step to improve the security of identity of the individual. Since a bank account number is a proxy for the relationship a customer has with a bank, then an additional proxy is purely a convenience mechanism. Care should be taken that such a service could easily become a national identity database and therefore the requisite design principles would be appropriate for such a mechanism. Use of such a service should be optional for customers.

Confirmation of access to funds with certainty meets the requirement of the user community for information relating to the payment. In the digital economy this feature would address many customer anxieties and allow a range of services to emerge that do not rely on the card payments infrastructure (which ultimately settles via the ACH/RTGS system).

- ii. What other characteristics or features are important for a U.S. near-real-time system?

We believe it is important to embrace international standards and would recommend adoption of ISO 20022 as the model for future payment systems development.

In addition, the recognition of a multi-currency approach is warranted, to enable future interoperability with similar systems in other jurisdictions, and particularly those where the US dollar is cleared.

6. Near-real-time payments with the features described in the second desired outcome could be provided several different ways, including but not limited to:
 - a. Creating a separate wire transfer-like system for near-real-time payments that leverages the relevant processes, features, and infrastructure already established for existing wire transfer systems. This option may require a new front-end mechanism or new rules that would provide near-real-time confirmation of good funds and timely notification of payments to end users and their financial institutions.
 - b. Linking together existing limited-participation networks so that a sender in one network could make a payment to a receiver in another network seamlessly. This option may require common standards and rules and a centralized directory for routing payments across networks.
 - c. Modifying the ACH to speed up settlement. This option may require a new front-end mechanism or new network rules that would provide near-real-time

confirmation of good funds and timely notification of payments to end users and their financial institutions. Payments would be settled periodically during the day.

d. Enhancing the debit card networks to enable ubiquitous near-real-time payments.

e. Implementing an entirely new payment system with the features described in the second desired outcome above.

- i. What would be the most effective way for the U.S. payment system to deliver ubiquitous near-real-time payments, including options that are not listed above?

We believe that the option e above is the most appropriate route. This would allow a migration path for those organizations wishing to participate and reduce risk to the overall economy. Any changes to the existing processes are complex and lengthy and confuse the end user. A new service is more likely to be perceived as a game changing move and may attract third party investment. A new capability requires some considerable investment in time and resources. A risk based approach needs to ensure that this does not detract from the operation of existing infrastructure.

- ii. What are the likely pros and cons or costs and benefits of each option? What rule or regulation changes are needed to implement faster payments within existing payment processing channels?

We believe that other options are more complex for participants, high risk and may not be economically viable. This would require further extensive study.

- iii. Is it sufficient for a solution to be limited to near-real-time authorization and confirmation that good funds are on their way, or must end-user funds availability and/or interbank settlement take place in near-real time as well?

The end customer often prefers immediate access to funds. The methods used to ensure this do not have to be transparent to the consumer or business. There are a number of possibilities and these should be assessed on the basis of risks (credit, liquidity; operational), costs (both to banks/providers and users), and benefits.

- iv. Which payment scenarios are most and least suitable for near real-time payments? (B2B, P2P, P2B, POS, etc.)

There are multiple examples in each of these categories that are suitable candidates for real time payments. There are also examples that are not. Repetitive payments or collections are commonly not early candidates for real time, as predictability of cash flow and revenues are also good attributes for corporate users. In each segment the speed, convenience and price of the transaction are the driving attributes that will determine adoption.

7. 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?

The requirement to replace checks is clear. The challenge is to create an electronic payment instruction with similar attributes and convenience. Customers will adopt new methods that satisfy

their requirements. Speeding up check processing does not address the fundamental issue that customers may not wish to write checks in the first place, as this slows down the transaction. Checks could reasonably remain as an offline activity, for those customers who wish to avail of this product, if priced according to the costs of processing.

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

The potential to move money faster will attract fraudsters. Adequate common standards around authentication controls for the initiation of payments should address the fraud risk, whether faster or slower payment system. Current fraud detection and monitoring systems will need to be enhanced to react faster to the volume of transactions. Alternative strategies exist that include customer limits, channel limits and profiling.

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

The nature of the risk is potentially the same. The speed of execution may change. The introduction of any new mechanism delivers a target for fraudsters and so requires specific management.

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

We would refer to the widespread introduction of mobile real time bank-account to bank-account payment services in other countries, including India, Poland, Sweden and the introduction in the UK scheduled for 2014. Demand is growing and customer usage has exceeded expectations. In all of these countries where services are live (UK not known as yet), these services are priced as an added value service by banks.

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

Continued disparate developments, lack of reach and interoperability. Lack of scale could eventually lead to a contraction in investment, possible collapse of some of the services (or niche providers), and/or a high price for the user. It is likely that functionality will be restricted and tie in customers to one particular option. Lack of interoperability is likely to continue.

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

Not known at this time. This would require further research.

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

Real time or intra-day accounting platforms are required to truly embrace real time payments. In addition, many back-end systems are batch operated. This may be appropriate for forward dated batch credit transfer and direct debit transactions, but it is no longer appropriate for immediate transactions, whether high or low value. Regulatory reporting environments are driving towards real time data. The commercial reality of trade is speeding up and payment processing needs to keep pace. Many corporates are moving to real time processing as they upgrade their own systems. This is an eco-system development that does not stop at the clearing and settlement and banking layer. In many countries, corporate users are demanding an improvement to the current model.

i. What is the likely timeframe for any such modernization?

We believe it is possible to effect a large scale migration within an eight to ten year horizon, provided adequate consultation, planning and strategy is shared with the respective stakeholders.

12. 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.

i. What are the merits and drawbacks of this suggestion?

Merits – convenience, accurate payments; reduction in returned payments.

Drawbacks – cost, oversight; challenge of management of personal data; data cleansing; primary account versus secondary accounts.

ii. What is the feasibility of this suggestion?

This approach has been taken in other countries and it is possible to learn from their implementation strategies and approaches. We believe it is entirely feasible.

Electronification

13. 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.)

Managing the decline of checks is a complex program that requires considerable investment in consultation and the design of alternative niche solutions to address a wide variety of use cases for this instrument. It would be more appropriate to focus on use cases enabled through alternatives such as faster payments to displace current check usage.

- 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."

Any decision needs to be aligned to a comprehensive national payments strategy, which outlines alternatives and ensures options are available to those who require them.

- iv. What is the appropriate target level and date?

This requires further analysis to determine drivers, costs, alternatives and a focus on outcomes that could be driven by use of behavioral economics.

Business to business

14. 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?

Business-to-Business payments will continue to migrate gradually from check to card and ACH payments in spite of industry efforts. This migration will continue to be largely driven by purchase card adoption and technology upgrades of payment and accounting systems within the middle market and large corporate customer segments.

In the future increased check erosion may be driven by payment enhancements to automate the AR and AP matching process as well as improved ACH and electronic product offerings to the small business customer segment. The industry has traditionally struggled to provide a simplified and economic payment solution for the small business segment to pay their suppliers. Until that is achieved their use of checks will continue.

ii. What other barriers need to be addressed to accelerate migration of these payments?

Scalable payment solutions which vary in complexity and cost to match individual consumer and corporate payment needs / use cases.

iii. What other tactics, including incentives, will effectively persuade businesses and consumers to migrate to electronic payments?

The payment solutions provided need to be economic from a B2B perspective and economic and convenient from a consumer view

iv. Which industry bodies should be responsible for developing and/or implementing these tactics?

It will be largely upon the banks and vendor community to develop the products and price them accordingly to create the customer demand. It will be upon the infrastructure providers to provide for the infrastructure that provides for greater ubiquity and interoperability to foster this innovation

Cross-border Payments

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

ISO 20022 xml is the de facto international standard worldwide for new payment products and services. We believe that the adoption of ISO 20022 as a longer term strategy within the US payment system would benefit the US:

- Lower total cost of ownership of payment systems and ancillary systems
- International standardization would drive interoperability with other systems/jurisdictions
- Improve the options to carry remittance data with the payment instruction
- Reduce costs for end users, particularly corporates integrating data to AP/AR systems.

16. 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?

A clear comprehensive strategic direction, combined with industry leadership to achieve a stated goal, where the costs and benefits to all parties are well articulated and understood. This includes an understanding of the broad principles of the pricing models that fund such developments. It would be helpful to incorporate definitions of what is collaborative and what is competitive and a dialogue with the regulator to avoid any re-writing of the rules once a new system is live.

Safety

17. Payment security encompasses a broad range of issues including authentication of the parties involved in the transaction, the security of payment databases, the security of software and devices used by end users to access payment systems, and security of the infrastructure carrying payment messages.
- i. Among the issues listed above, or others, what are the key threats to payment system security today and in the future?

There is a lack of authentication standards to promote interoperability between service providers. This leads users to manage multiple passwords with a risk of not properly securing passwords or weakening passwords to simplify access.

The emergence of non-bank payments service providers that lay at the edge of the regulatory environment do not guarantee secure payments data environment.

Lack of standards around proximity mobile payment chips can lead to potential vulnerabilities and malicious attacks.

Mobile phone devices lack level of security of their on-line counter parts mainly due to the proliferation of operating systems, the use of downloaded apps and the disclosure of information to these apps. Although trending positively, there is not wide adoption of antivirus / malware implementations.

- ii. Which of these threats are not adequately being addressed?

The scenarios mentioned above are being addressed in the industry but have not yet reached a high level of maturity.

- iii. What operational or technology changes could be implemented to further mitigate cyber threats?

Authentication standards to promote interoperability will require the collaboration of industry players. A first promising step is the FIDO alliance that includes wallet and payment providers such as Google and Discovery.

Many non-bank payment service providers are rapidly moving toward more Bank-like practices around fraud and consumer protection; however, there is still room for Regulatory oversight that balances good controls with their ability to innovate.

Standard mobility payment chips will require collaboration between device manufacturers, network providers and payment services organization. There is little evidence that there is any significant activity towards this goal.

Mobile device security will entail a combination of customer education, standards and technical innovation. The PCI Standards Council recently published their guidance around security practices for merchants and end users that is a solid first step specification.

18. What type of information on threat awareness and incident response activities would be useful for the industry?

i. How should this information be made available?

As the virus / malware prevention software market achieves higher levels of mobile adoption, consumer can use these existing channels to be informed of existing threats and their remediation processes.

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

i. What are the obstacles to the adoption of security-related payment standards?

The biggest challenge to payment security is in mobile payments. The competition for market share between participants does not currently encourage the collaboration required to promote common security standards. An example would be the differentiated approach between ISIS and Google Wallet.

20. What collaborative actions should the Federal Reserve Banks take with the industry to promote the security of the payment system from end to end?

The FRB would need to influence behaviors around security standards where competitive markets do not encourage such behaviors. The risk is where oversight discourages innovations in the development of new security technology.

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

Real time payments would help in developing more sophisticated and effective fraud detection and remediation methods. With advances in continuous flow and event processing technologies, payment service providers could more quickly react to a potential incidence.

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