

Comments on Payment System Improvement – Public Consultation Paper

Submitted by
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General Comments.

These comments are in response to The Federal Reserve Banks' ("the Fed") September 10, 2013, "Payment System Improvement – Public Consultation Paper (the "Paper"). In general, the Fed is to be commended for the creation of this Paper as it reflects an acknowledgment that the current US payments environment is not meeting the needs of all of its constituents and is falling behind similar systems in other nations, making the US less competitive.

The Paper does a good job of identifying 9 major functionality shortfalls in the existing US payments environment. The list could have been 7, 8, 10 or 11 gaps depending on how these gaps were defined and organized. The number is irrelevant. What is important is the general conclusion that the current environment is badly in need of improvement.

However, the Paper fails to bring focus on to the reason why it was issued in the first place, namely the need for a faster payments infrastructure in the US. For example, there is a discussion on the paper related to the future of checks which I believe is a distraction within the context of real-time payments.

We need to be very clear about the problem being addressed so the Problem statement could have stopped after the first sentence "*End users of payment services are increasingly demanding real-time transactional and informational features with global commerce capabilities (and we do not have one)*".

The Paper then posits a number of desired outcomes which – I personally believe – make some premature conclusions and confuse means with ends. I also believe the questions asked in the Paper are premature and will deliver superficial (and thus, useless) answers or answers that will support a specific "agenda". I do not believe that this is the most efficient way to arrive at a viable solution as subject matter experts in each of the topics need to debate about alternatives to come up with an optimal solution.

To some extent, I feel the Paper reflects some of the ambivalence that the Fed has about its role in addressing the problem and how it will move forward with it. By casting such a broad net, the Fed seems to indicate that it is more comfortable in a strategy-setting role rather than as the primary driver for this initiative.

This reluctance to assume a driver role is appreciated. Presently, there are actors in the US payments environment - some quite powerful - who benefit from the current systemic inefficiencies and who will push back on any initiative to improve the payments system. “What is the business case?” they will ask; “it is too expensive!” they will claim; “let private industry do it” they will cry; and whereas their concerns are valid and need to be included in the debate, they cannot justify inaction.

The Fed’s Role

However, most of the industry (consumers, merchants, Corporates, and even many banks and other players in the financial payments business) look to the Fed to provide this leadership. There is no other player that commands the respect and has the moral as well as the legal authority to make these changes happen.

Be the leader. To resolve the problem at hand the industry needs more than a “listening” body or collaboration partner. It needs strong leadership. This mean to drive the process: set up meetings, ensure all required stakeholders participate and are heard, drive the discussions while managing those who advocate inaction or attempt to drive a proprietary agenda, coordinate the output from multiple discussion tracks (see section “Going Forward” below) follow up on actionable items and, when necessary, make the tough decisions between competing points of view.

Represent everyone but do not be beholden to any single player or segment. This will probably be challenging for an organization who is accustomed to deal only with financial institutions and who, in certain context, sees these institutions as “customers”. Being a leader and represent everyone means to NOT adjudicate its responsibilities to define a new real-time payments scheme to the Financial Services industry. To “improve the speed and efficiency of the U.S. payment system from end-to-end” means also incorporate the needs of ALL payment actors, including consumers, merchants, Corporates, and governmental agencies.

Define standards, not products. A Fed-led initiative should develop standards for message formats, security, performance, exception handling, etc. as well as rules and regulations that will govern the operation of the new payment scheme. These rules would include, for example, KYC/AML compliance, buyer/sender – seller/receiver protections, data protection, etc. The initiative needs to stop short of developing products as this is the domain of private industry UNLESS the function is critical to a new real-time payment scheme and cannot be built by private industry for economic or competitive reasons. Despite all of its shortcomings, the European Payments Council (EPC) did this part right with SEPA Direct Debits and Credit Transfers: they defined record and file formats, they defined the roles for the Pan European Clearing and Settlement Mechanisms, and they defined the regulatory framework that was adopted into law in all participating countries. They did not create a payment processing operation, clearing houses, or a payments brand. This is a model worthwhile of consideration.

Questions Feedback

As noted previously, the questions listed in the Paper appear premature and superficial which may lead an uninitiated reader to think that answers to these questions will deliver the solution being sought.

Reality is more complex and much debate is required to get to the end point. For example, much is made of the fact that a new payment scheme needs to be ubiquitous like the current system and that systems like PayPal, which require enrollment, are less desirable. However, our present system is not ubiquitous (persons outside of it are called “unbanked”) and there is nothing wrong with enrollment-based systems such as PayPal as long as they are interoperable and can deliver on the goals of real-time delivery of good funds.

Readers may think that the above example is just “parsing words” but words DO matter; clear definition and understanding are keys to successful projects. Thus, debate is needed, not for the sake of debate only but to arrive to common understandings to avoid confusion and misunderstanding later on.

Another concern raised by these questions is that it gives the impression that we could meet our needs by modifying existing payment environments. This is a trap that initiatives such as this one tend to fall into; assuming that “if we could modify our existing environment a little, it would give just enough benefits”. In other words do “as little as possible and just enough” to improve marginally on the current environment. This is a very short sighted approach and one I sincerely hope the Fed declines to pursue.

We have a rare opportunity to re-think and re-architect our payments environment and this thinking should not be colored by the limitations of the current ACH, or cards, or paper based payment networks. We need to decompose payments to their core elements (e.g. “a payment is an exchange of value”) and ask basic questions such as “how can we transfer ownership of value most effectively in a real time basis?” For many years, man tried to fly by developing machines that imitated the birds’ flapping of wings with little success. It was only when the basic components of lift, drag, thrust, and gravity were understood that early flyers were able to develop successful solutions to flying that did not imitate birds. Similarly, we have – as an industry - a terrific opportunity to dissect our current payment processes, examine its basic building blocks, and design a new, real-time payments scheme for the 21st century which may bear little resemblance to the ACH, check and card based systems of today.

Therefore, I suggest that the Paper’s questions become the foundation of a series of discussion “tracks” which will foster such debate from all relevant parties (see section “Going Forward” below). With such a caveat, I respectfully submit my feedback on the questions posed in the Paper

Q1. In addition to the identified gaps and opportunities, the Fed should also include the usage of payment related data and the inability of the payments industry to leverage its value. Another infrastructural gap is a fragmented regulatory environment which stifles innovation. Lastly, we also have an educational gap regarding the low level of education and understanding of payments amongst consumers, especially among the younger generations.

Q2. Although in a general sense I agree with the desired outcomes, I think that 10 years is too long a time frame. Whereas 10 years may provide a good strategic horizon, 3-5 year deliverables must be identified and provided.

Q3. Fed should be a leader as noted in my previous comments above. There may be instances where the Fed is also a participant as the bankers’ bank and as the operator of a centralized CSM when not

enough private companies are prepared to set up to play that role. However, the Fed's main role should be to lead and drive the creation and implementation of a new real-time payment scheme. I recommend that different participants represent the Fed when it is called upon for the Fed to be an "actor" in the new scheme.

Q4. I do not believe that such massive effort to essentially re-architect the US payments systems can be done solely by private enterprise and/or without any central coordination. It would be the equivalent to say that private enterprise would re-architect and re-build the US Interstate Freeway system. See previous comments regarding the proposed role for the Fed as a leader and as coordinator.

Q5. Although in general I agree with these requirements (as I wrote a White Paper that documented some of them), I feel that this question is being asked prematurely. Although the "spirit" of the second desired outcome is the right one, there could be more than one implementation as there many nuances and alternatives that must be considered. This is where the debate is necessary. For example, it is already noted that multiple interoperable communities could work just as good as a single all-encompassing payment scheme.

Similar "parsing" of the other requirements can be made. For example, is the need for the sender not to know the beneficiary's bank account number because of safety, convenience, or both? For example, in Germany, consumers and businesses tend to freely share their account information and these numbers can be found in letterheads and web sites. Germans are comfortable sharing this information because they keep a close eye on their bank accounts (this is a cultural and educational aspect of the German marketplace) and because their consumer protection laws are quite strict and consumer friendly (a regulatory component). Still, many Germans use PayPal not because they do not want to share their bank account information but because they find it more convenient. I am not advocating that the US implements a German based solution but trying to make the point that there are different solutions depending on what problem is being solved for.

Q6. Similar to the comment above, possible solutions cannot be properly defined in short simple answers to a question. One comment deserving mention...let's not keep recycle old stuff or limit our thinking by the current payments schemes or limit our scope to selected segments (e.g. P2P, B2B, etc.)

Q7. Any discussion about the future of checks is a distraction in the context of creating a new real-time payment scheme. If real-time payments are successful, market forces will drive down the usage of paper checks until they become uneconomic for all actors.

Q8. Risk and fraud management is a major consideration in the creation of any new payments scheme. But let's be clear that a new real-time payment scheme, in and of itself, is NOT any riskier than what exists today. The risks are indeed differently and the speed in which fraud could occur could be much faster. However, we need to learn how to identify and manage these risks, not use them as an excuse for inaction.

Q9. I believe that this question mixes apples and oranges. Mobile phones today are but wallets that store payment instruments such as bankcard numbers. In the future, mobile phones could become the

payment instruments themselves if banks link these devices directly to bank accounts. They could also store and carry value in the phone itself (e.g. like MPesa in Kenya where mobile minutes is the “value” being exchanged or by allowing Bitcoins to be stored carried in phones and exchanged outside the financial system). However, the impact of mobile phones should be incidental to the creation of a new real-time payment system and should not create a dependency.

Q10. If the status quo is preserved, users of the payment system will migrate to players outside the financial system that can meet their needs for faster delivery of value and information. To some extent PayPal is a great example of this as it offers consumers and merchants a value proposition not too dissimilar than what is being discussed in the Paper (e.g. privacy, immediate notification, good funds, etc.), all within its own environment. Private industry may be able to offer only partial solutions to the problem and these solutions may not be interoperable. Further, societal and macro-economic costs will continue to increase as capital is not fully utilized making US businesses less competitive leading to complaints from businesses and consumers and ultimately mandated legislation.

Q11. This is one of the most challenging issues in the development of a new real-time payments system as core processing systems will need to be upgraded to support the posting of real time transactions if they are not already doing so. This whole topic should be one of the “tracks” listed below for discussion and debate in order to develop alternatives and incentives to address this particular challenge.

Q12. A directory of aliases of new payment credentials pointing to accounts where value is stored is indeed an alternative but it does NOT have to be centralized or its control be held by any single institution (or group of institutions). I know I am smart enough to know that I do not know everything and would suggest leaving this topic to the experts on identity and credentials.

Q13. See comments in Q7 above

Q14. The need to include remittance information with new real-time payments should be indeed a requirement for Business payments. Regarding consumer bill payments, this is a valid concern and is related to a major gap identified earlier: the lack of consumer education about payment alternatives. When the UK mandated that checks would no longer be acceptable by 2018, there was a major lash back from older and retired folks that were not aware that there were less expensive and more convenient alternatives to paper checks. Education of payments users across all demographics is a “must have” component in the creation and introduction of a new real-time payment scheme

However, not only do consumers need to be sold on the value proposition of real-time payments but financial institutions need to get creative to develop new products and services that are more appealing. For example, in Finland and other Nordic countries where real-time banking is already a reality, banks are introducing the concept of e-invoicing. With e-invoicing, consumers set the rules (e.g. amount, time, etc.) under which banks can automatically pay bills converting from the traditional “pull” Direct Debit method to a “push” payment. This new service was developed in reaction to the new SEPA mandate requirement and it is being well received by consumers because it gives them more control (rather than giving an external third party a blanket authorization to debit their bank account) and it is an example of the kinds of new products and services that could be offered under a new real-time payments scheme.

Q15. To a great extent. Any new development to facilitate a payment scheme should be based on ISO 20022 as this will also assist in the interoperability with non-domestic schemes. For that matter, IBAN should also be considered as one of the requirements from this initiative, maybe not as the main bank account identifier initially but as one of the aliases that could be assigned to a natural bank account number.

Q16. Payments are not the end in and of themselves nor do they happen in a vacuum. Payments generally happen in support of trade and commerce. Being able to deliver the value added and the additional services noted throughout at a reasonable price point plus proper market education (a nationwide rollout marketing campaign may be not only appropriate but necessary) all will bring the necessary adoption. This should be a combined discussion point between the Business/Economic and the Branding/Education “tracks” defined below.

Q17. Security (which I defined as the safety and soundness of any payment scheme as well as the implied trust the users have in the system) is certainly a major topic in the development of any new payment scheme. The topic is quite broad and could be intimidating as changes such as the ones being proposed could certainly impact the security of the US payment system (although, in some cases, security may be increased by having real-time payments information). However, it should be clear that no system will be ever be completely secure and that the cost of making it so could be used as an excuse for not doing something or as a subterfuge to impede development.

Again, knowing that I do not know enough on this topic, I would refer all of the security related questions to the Risk Management “track” defined below.

Q18. See comments above

Q19. See comments above

Q20. See comments above

Q21. The US payments industry has a unique opportunity to re-think its low value payments environment and create a new real-time payment scheme that will meet the current and future needs of all stake holders. This opportunity comes maybe once every 50 years and, as an industry, we should embrace it. As with any change, there will be winners and losers; the latter certainly resisting any change, the degree of this resistance in accordance with their size and influence.

I believe that many people and resources are prepared to be invested in the search for a better way to do payments in the US but the Fed must provide the leadership and assurances that this is an effort that will move forward despite any anticipated resistance. It is crucial that the industry commits earnestly and honestly to the process and the resulting outcomes.

Going Forward

There was one very important question that the Consultation Paper did not ask and that is “how to move the process forward?” Most projects of any magnitude require three stages for their development:

1. **Definition Stage.** In this stage, the scope of the problem is defined, optimal solutions and possible alternatives are identified, risks and issues are recognized and mitigation strategies are defined.
2. **Development Stage.** In this stage, technical and business development is performed by all relevant parties to the new payments scheme
3. **Implementation Stage.** In this stage, the new system goes live and user (e.g. consumers, corporates, banks, etc.) adoption takes place.

At this point, I would contend that we are in the definition stage of this process. I would also assert that trying to define the problem and offer solutions in a monolithic form is a sure recipe for disaster. There are just too many issues to be dealt with and too many opposing points of view; any “comprehensive” discussion on the topic will wander aimlessly, jumping from topic to topic with little resolution. Further, the skill set and subject matter expertise needed to address all the requirements varies greatly making it impossible for a single person or group of people to effectively deliver viable recommendations.

Thus, I strongly recommend that the problem be split into several “threads” or “tracks” which converge into a final solution. Each track would draw on the knowledge of subject matter experts in order to answer the relevant questions within each track making final recommendations towards the optimal solution. The recommended tracks are:

1. **Clearing and Settlement Mechanisms.** This track would explore the need for the US to upgrade its low value Clearing and Settlement Mechanism (the service currently provided by the Fed and The Clearing House). This track would ask and answer questions such as:
 - Is there a need for a low value Real Time Gross Settlement system or is a faster batch clearing system adequate?
 - Should the Fed make a copy of Fedwire and run that as the low value RTGS?
 - If a batch oriented system, how many times throughout the day should the system clear? Why not a continuous batch settlement processing?
 - What are the systematic risk implications of each approach?
 - What are the technical implications of any of these implementations and the impact on participating parties connecting to this CSM?
2. **Real Time Posting at Financial Institutions.** Any real-time CSM would be useless if financial Institutions cannot make “good funds” available as soon as the transaction is received. This track would ask and answer questions such as:

- What would it take to modify existing systems to immediately post received transactions to deposit accounts and make the “good funds” (as defined in the Consultative Paper) available to customers?
 - Is real-time posting of transactions required to make good funds available to customers? Can these needs be met with a “memo posting” system such as the ones supporting online banking and ATM/POS?
 - Should the scope of this initiative be limited to only deposit accounts (i.e. Checking and Savings) or should it also include other account types?
 - What are the roles that large processing bureaus such as FIS and Fiserv play in meeting this requirement?
 - What are the technical and risk implications from such a change?
 - What is the cost of migrating to such an environment?
 - Should these changes be mandated by the Fed or should the free-market drive this conversion and, if the latter, how to ensure compliance over the long term?
3. Credentials. The current scheme of using bank account and routing transit number or a PAN (Primary Account Number usually the number on a debit card which is associated with a deposit account) is cumbersome to use and can be compromised to make fraudulent transactions. This track would ask and answer questions such as:
- Is there a better set of credentials to access the value stored in bank accounts which are more “friendly” (e.g. e-mail address, mobile phone number)?
 - How would these credentials work with Corporate accounts?
 - How can these credentials be made secure and tamper-proof without creating unwanted friction? Is this even possible?
 - Is there a way of making these credentials electronic so that they can be carried on an external device such as mobile phones?
4. Risk Management. A new real time payment scheme such as the one being proposed will certainly introduce new risks that need to be managed. These risks may be different than the ones currently being experienced but they are not reasons for not moving forward. This track must exercise care to ensure that the answers from this track are positive (i.e. “this is how these new risks will be managed”) rather than a negative (i.e. “this should not be done because it is too risky”). This track will likely subdivide into groups to address different types of risk (e.g. systematic risk, fraud risk, etc.) and will attempt to answer questions such as:
- What tools should be in place to minimize risk for financial institutions – both systematic and fraud?
 - What recourse must customers have when fraudulent transactions are posted to their accounts? Are these transactions covered by Reg. E and do all the timeframes for dispute management listed therein apply?
 - How will the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) advocated by Basel II impact deposit economics and the proposed real-time scheme?

- What tools will be required to manage these new risks? What data will be required to manage these risks?
 - What other new regulations will be required?
5. Business/Economics/Legal. Implementing a new real-time payment system such as the one being proposed will require investment from the Fed, Financial Institutions, Corporates, and many other payment actors. Although the benefits of such a system have been detailed in the Consultation Paper, are these benefits enough to justify this investment? This track would ask and answer questions such as:
- Who will quantify the societal benefit of such new scheme and what are the elements of such quantification? What is the economic and societal cost of not doing something?
 - How will Intellectual Property related to real-time systems be owned and protected from claims from participants in these tracks?
 - What business model is appropriate to recover the investment required to implement this new capability? How much should financial institutions charge for these real-time transactions?
 - Should this new scheme use an interchange model similar to credit and debit cards or should Financial Institutions charge senders and receivers independently depending on the value accrued by each and based on the overall banking relationship?
 - Should new contractual arrangements be put in place between financial institutions and consumers and merchants/Corporates or could these new transactions be covered under existing account agreements? How will new contracts impact adoption?
 - What value added products can be built on top of a real-time payments scheme?
 - How can very large Financial Institutions with large number of accounts be prevented from abusing their market power?
 - Should pricing be controlled or, at least, capped by the Fed?
6. Branding/Market Education. The new proposed payment scheme may end up looking like very different from what consumers, merchants, and Corporates are currently used to. It is critical that key stakeholders and consumer groups receive – in plenty of time – information about these changes and be given an opportunity to comment. Further, it is also critical that proper consumer education is provided to avoid a repeat of the UK fiasco related to the demise of paper checks by 2018. Thus, this track would ask and answer questions such as:
- Should this new service be a “branded” service and, if so, who owns the brand and how should Financial Institutions integrate this brand with their own?
 - What are the implications of a “generic” brand or service name (e.g. UK’s Faster Payments)? How will consumers and corporates become aware of the new scheme?
 - What sort of educational campaigns will be required to educate consumers and Corporates? What are the “messages” that will be delivered to prevent a lash back from people who just do not want to change, regardless of the benefit?

- Who pays for this education?
- How will the new system measure success?

There may be one or two more categories but I believe that the above six covers the bulk of the issues that need to be dealt with. Additional categories could be added or any of the above categories could also be split into sub-categories. Regardless of the number of categories, the concept of dividing the problem into smaller, “actionable” areas remains valid.

These categories certainly have dependencies on each other. For example, the economic/business model track is highly influenced by the technical recommendations made by the CSM and Real Time Posting tracks and the Risk track decisions are highly influenced by the work and decisions made by the Credentials track. That is why I recommend that, as these groups meet, reports be made of their progress and decisions to a Plenary coordinating committee in order to keep the different racks aware of the work and direction of the other tracks.

I envision that participants on each of these tracks would meet quarterly and after about 3-4 meetings they would be in a position to make recommendations on each of their respective areas. These recommendations would be integrated into a consolidated document that would be published for opinion and comment at large. Thus, in about 18 months from launch of the effort, I can see specs and a compliance calendar being published by the Fed so that private industry can begin to create new products and services (the Development Stage) which – in theory – could begin to be introduced in 24 months or so after launching of this process (the Implementation Stage). It is not the intent of these Comments to provide a detailed project plan proposal as the processes to manage such large undertaking made up of multiple tracks should well understood by the Fed and all the participants but to note the fact that if this initiative is funded and launched in early 2014, we could be seeing the implementation of a real-time payments environment by early 2017.

About the Respondent

René M. Pelegero founded Retail Payments Global Consulting Group LLC (RPGC Group – www.rpgc.com) in 2002, as a specialized consultancy practice in “customer not present” payments and cross-border/international payments. René brings to his Clients all the experiences accumulated from working for PayPal and Amazon.com and providing consulting services to some of the best known web properties like Google and Microsoft and payment industry key players such as Visa International and First Data.

René has also held senior management positions at Electronic Payment Services, Inc., a leading electronic funds transfer (EFT) processor; GE Capital, an international consumer lending group; and Tandem Computers, a hardware manufacturer of fault tolerant systems heavily used by the payments industry worldwide. Quoted and published in many industry related publications, René's opinions are highly sought. He has been quoted in publications such as the Wall Street Journal, American Banker, Credit Card Management, USA Today, The Green Sheet, Digital Transaction, and many more. He has also contributed to specialized payment publications such as Association for Finance Professional's "The Exchange", the Canadian Payments Association "Forum", and Wiley Financial Series book "The Future of Finance after SEPA". During his tenure at eBay/PayPal, René filed for patents with the US Patent and Trademark Office for "Unified Identity Verification" and for "Payments Using Funds Pushing".

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