

Being responsive to user needs

A draft strategy for consultation
July 2016

Foreword from the Chair

The Payments Strategy Forum is a unique group of 22 experts who have come together from across the payments sector to deliver a Strategy to unlock competition and innovation in payments. Set up by the Payment Systems Regulator it represents the first time that all the relevant stakeholders have been involved in planning the future of the UK's payments systems. Our work has been conducted through Working Groups, open to anyone with an interest in payments, and involved nearly two hundred individuals from the Payments Community. Consumers, businesses, government, regulators, banks, challenger banks and FinTechs have all come to the table with their particular knowledge, experience, resources and creativity to make this Strategy what it is.

The Forum recognises that payments in the UK are already some of the best in the world for their resilience and reliability, trusted by the industry and customers alike. However, we want to reinforce the position of the UK as a global leader, and address those weaknesses in payments that are holding us back.

From the outset, we gave our commitment to focus on the interests of those who use our payments services: consumers and businesses. I believe that together, we have addressed their concerns and challenged the status quo to provide an ambitious vision for the future of UK payments. It is one that provides simpler access, greater innovation, increased adaptability and better security so that the payments system is ready to meet the needs of the current and future generation of payment service users.

I would like to thank everyone who has participated in this collective endeavour. It hasn't always been easy. Nor have stakeholders agreed at every stage on the priorities and solutions proposed. But there has been comprehensive involvement by the Payments Community, and the result is a consensus document that has widespread support.

Along the way we have been committed to being open, transparent and evidence-based in the way that we have conducted our work. To this end, the Forum has its own dedicated website where all meeting papers and draft documents from the working groups are available, where you can trace the Forum's journey from the start of our work, and where the Payments Community has been able to participate at every stage in developing this draft Strategy.

It is now over to you. We want to hear your views on the short, medium and long term solutions that we have proposed, and help us shape the final Strategy to be published in the autumn. We hope that you will join us through this consultation to help us deliver what we believe is a radical vision that will transform payments systems in the UK for everyone who uses them.

RUTH EVANS

July 2016.



Ruth Evans
Chairperson



I am committed to contributing to ensure our future national payment infrastructures and services are powerful, modern and provide access to all.

Marion King



We want to develop a UK payments system that enables new institutions to connect simply, easily, reliably and cheaply - and which allows them to send and receive payments competitively with all other counterparties without facing barriers

Otto Benz



We are uniquely positioned to achieve sustainable world-leading payments services for all users. The Financial Crime group aims to engender trust while removing friction, viewing the challenge through social rather than competitive eyes.

Russell Saunders



We want to create a payment system that allows new entrants and established providers to respond to end users' evolving needs

Carl Pheasey



I feel privileged to be part of the Forum with the opportunity to shape and innovate the Payment Industry improving it for all users.

Becky Clements



Technology and Competition are creating a dynamic market to make payments better for both consumers and merchants. It is a real privilege to be part of the PSF and help bring about these exciting changes

Philip McHugh



I am delighted to represent the interests of credit unions and other small PSPs in the work of the Forum. It's so important to increase competition and diversity by simplifying access to our payments systems.

Mark Lyonette



I'm passionate about incorporating emerging payments industry needs within key initiatives to be championed by the PSF in its critical role shaping UK payments' future

Mike Smith



Our customers and stakeholders demand 'Speed, Ease and certainty', our strategy embodies that with certainty or resilience at the heart of all we do

John Hackett



The changes we are proposing will ensure innovation is unleashed to promptly meet the requirements of service users, whatever those requirements may be now or in the future

Carlos Sanchez



Customers want payments to be easy to use, secure, reliable, timely and good value. As a representative of a financial services organisation, which is committed to putting members first, I can really associate with the work of the Payment Systems Regulator, which is focused on making payment systems work well for all that use them.

Neil Lover

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Executive Summary

- 1.1 The complexity of payment systems in the UK makes it difficult for the industry to meet the changing needs of a diverse group of end users. We are proposing a Strategy for simpler access, greater innovation, increased adaptability and better security so that the payments system is ready to meet the needs of the current and future generation of payment service users.
- 1.2 Established in October 2015, The Payments Strategy Forum (the Forum) represents the first time in the history of the UK payments industry where all sectors have come together to deliver a Strategy to unlock competition and innovation in payments.
- 1.3 We are committed to opening up payment systems to much greater competition than exists at the moment. This Strategy builds on good work already underway in the industry to improve access to the payments system. At the same time, we want to start delivering the building blocks for a new architecture for payments that will use new technology to enable consumers and providers to do things entirely differently in the future. To this end, we will be able to put in place the foundations for a new framework for payments, making use of new technologies to deliver a system that is responsive to consumers and businesses, improves trust in payments and is simpler to access for new participants.
- 1.4 Some problems can be fixed straight away. Others will take time. This document proposes a series of collaborative initiatives to help smaller Payment Service Providers compete on a level playing field with larger ones. It also charts a considered transition to a new architecture for interbank payments that will enable more innovation along with a roadmap for how to achieve it.
- 1.5 In the short term, we can build on the work already underway to help to simplify and open up access to new entrants to the existing payment systems. This Strategy supports the on-going work on sort code and settlement account accessibility; the development of aggregator models and establishing of common participation models and rules. These initiatives should deliver immediate benefits to PSPs now and in the shorter term to close the gap between direct and indirect players in the market.
- 1.6 To give these initiatives greater traction, the Strategy proposes consolidation of the interbank system governance of Bacs, Cheque & Credit Clearing Company and Faster Payments (FPS) into one new entity. This would act as the springboard for the new payments architecture emerging in the future, and would enhance and accelerate the benefits that are to be achieved from our other initiatives.
- 1.7 In the medium term, we want to unlock the ability of new and existing technology providers to meet user needs for greater control, greater assurance and enhanced data. The Strategy proposes the universal adoption of internationally recognised messaging standards ISO20022 and the development of common governance for the APIs that act as the glue holding together the payments architecture and would provide the ability to send more data with payments.

What are APIs?

APIs (Application Programme Interface) are not new nor are they singular in kind. An API can be considered a set of programming standards that allows one piece of computer software to communicate with another. Web based APIs are frequently used to help join up services into a single package that works well for the consumer. For instance, Uber uses APIs to 'glue together' Google maps, Debit or Credit Cards and telephony in one useful app to help people order and pay for taxis quickly.

Open Access API is the name we are giving to this new set of APIs that will hold together our new payments architecture.

What are messaging standards?

Electronic payments are messages that are sent electronically between payers and payees. These messages are prescribed and governed by a set of standards so that all the participating information systems can communicate. Different payment systems use different messaging standards. ISO20022 is an internationally recognised messaging standard. Using a standardised message enables the transfer of information more easily and reduces the risk of losing data 'in translation' between messaging formats. It also stops corporate customers of PSPs being 'locked in' to their proprietary messaging format.

- 1.8 And, over the longer term, we want to create a framework that will be agile in addressing the needs of users through competition. The Strategy proposes the first building blocks for the single payment delivery mechanism that will underpin a new payments architecture that reduces the need for collaboration when changes are needed in the payments system.
- 1.9 A detailed implementation plan will consider the potential migration path to this new architecture, how long legacy systems would need to remain in place and whether this transformation could be provided through a central organisation or a distributed network. It will analyse the costs and benefits of transition to the new architecture for all participants in the payments system, including the users, before proposing a long term programme of activity for the industry.
- 1.10 We also want to increase trust in payment systems. To that end, we are proposing a set of initiatives that sit alongside our recommendations which encourages industry to work together to improve security and reduce financial crime. The Strategy proposes the publication of agreed industry guidelines on identity, verification, authentication and risk assessment to standardise its approach and reduce some of the weaknesses in the system that criminals exploit. In addition, the Strategy argues for a co-ordinated campaign to give businesses and consumers the tools to help them reduce the threat of becoming victims of crime.
- 1.11 Through these proposals, the Forum has set an expectation for the industry to deliver truly responsive, resilient, trustworthy and accessible payments which will benefit everyone.
- 1.12 Our Strategy-setting process is conducted in two stages. Here, we set out our vision for the future. We have addressed the key detriments that the Payments Community has told us need fixing, and proposed solutions to them. We want to hear from you whether you agree with our approach. Your responses will inform the second stage - a cost benefit analysis of the solutions and detailed implementation design – which shall be published as part of a final Strategy document in the autumn.



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“We need a new system, a new architecture for payments that can respond quickly and painlessly when innovators want to develop better products for us.

The future system needs to be modern and open to new entrants so there’s more competition and dynamism in payments.

But we still want the reliability and resilience we’re used to. In this climate of increasing cyber-crime we need to make sure everyone is kept safe. We’ve got the technology to do it now. The regulators are ready. We need the structure to make it happen...”

Ruth Evans, Chair

Our vision

- 2.1 Our vision is for a new architecture for retail interbank payment systems^[1] in the UK which allows for simpler access, greater innovation, increased adaptability, and better security, while maintaining their resilience so that it is ready to meet the needs of the current and future generation of payment service users.
- 2.2 At the very beginning of the Forum's life, we set ourselves three objectives. A new Strategy would need to deliver payments that are:
- Versatile and responsive to user needs
 - Secure and resilient
 - Efficient
- 2.3 Our Strategy delivers these objectives. Instead of following the historic, short-term approach to payments, the Forum sets out a considered and long term vision for a retail interbank payments system that will be responsive to end user needs, increase trust in the system and simplify access to the market, all while maintaining its resilience.
- 2.4 Innovation has traditionally required collaboration and agreement across a number of stakeholders. This can slow down innovation as the changes required can only happen at the pace of the slowest stakeholder. Addressing this issue was one of the key reasons the Forum was established.
- 2.5 The new architecture will provide simple, open access to all Payment Service Providers (PSPs) that want it, connecting them easily and at a low cost. This could result in the development of innovative services being pushed into the competitive market as it is based on a simpler payment delivery mechanism that will enable more bespoke payment products to be developed and deployed by any participants in the system. This could enable a much quicker response from the market to meeting consumer and business needs.
- 2.6 The new architecture will be built using standards that are aligned with those used in other countries. This should make it easier for new entrants from overseas to enter the market, whether they are PSPs, Payment System Operators (PSOs), or network or technology providers. It should also allow for the number of participants and payment products operating over the architecture to grow and scale up, making it future-proof and allowing the UK to keep up with global developments.
- 2.7 The new architecture will continue to deliver the resilience and stability of the UK payments system that we currently enjoy, and may indeed enhance it even further. Any transition will be carefully managed to avoid any disruption or instability to consumers, businesses and the wider financial system. Indeed, our Strategy realises the need for more detailed design and consideration of our proposals.
- 2.8 In addition, the surge in 'big data' analytics has challenged many different industries to think about how they use information to improve and drive services. Our Strategy recommends a new data capability for payments built on new technology that could allow more information to be sent with payment messages, which could enable new and innovative payment products to emerge. Consumers, businesses, government, regulators and PSPs themselves will all be able to deploy that data in ways that work for them, whether that's improving security, tracking payments made or handing over more control to the payer. Data privacy and security will be paramount considerations throughout all of this.
- 2.9 Finally, the user experience at the point of engagement must be just as sophisticated as the architecture which underpins it. To this end, the Forum has agreed a set of financial capability principles (see Appendix 5) that should guide the testing and design of new payment products. These products should reflect and respond to real people's needs and not those of an idealised, 'perfect' consumer that does not exist. They should be inclusive of the least financially capable wherever possible and be intuitive so that all consumers can use them easily and safely.

[1] For the rest of this document when we refer to payment systems, unless specifically stated otherwise, we mean "retail interbank payment systems"

Payments in the UK

- 3.1 Payment systems are an essential set of infrastructures that underlie the UK economy. They let you pay the deposit on your house, withdraw money from a cash machine, and receive your salary directly into your account. In fact, any activity involving the transfer of money is likely to involve a payment system. This is why making payment systems work well for their users is of utmost importance, and this includes making sure that they are stable and resilient.

What is a payment?

Retail payments can be thought of as a transfer of value between two parties in exchange for goods, services, gifts and other reasons.

An electronic payment is an authenticated message sent from one trusted party to another on behalf of a payer and a beneficiary. The message contains information, such as the value to be transferred, so that account balances of the payer and beneficiary can be credited or debited accordingly.

This exchange of electronic messages is underpinned by an irrevocable agreement between banks to settle the value of these messages on behalf of their customers.

The actual movement of the money from one party to another happens at the point of settlement, where parties 'settle' their outstanding obligations. This is completed by each party's bank and can take place up to three days after the transaction between the payer and beneficiary. This 'time delay' results in credit risk.

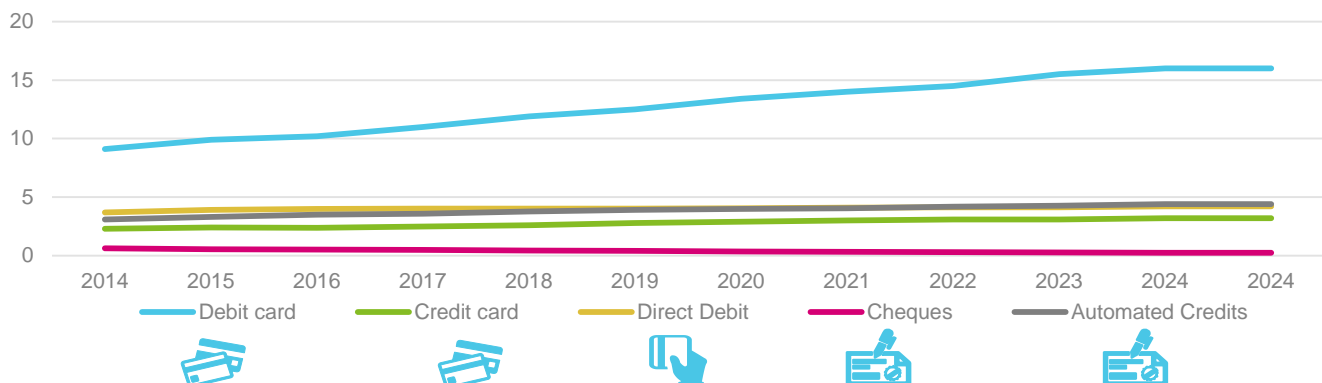
Settlement can happen at different times and in different ways depending on the payment method used. For most payment systems, it happens across accounts held at the Bank of England.

The growth of electronic payments

- 3.2 As part of the global trend towards digitalisation, the volume of electronic payments (e-payments) has grown substantially in recent years. There were 7.4 billion transactions across Bacs, CHAPS and FPS in 2015 worth approximately £74 trillion and volumes for FPS grew by 13% compared with just 4% for Bacs and 3% for CHAPs (Payments UK, 2016). E-payments can be seen as a substitute for cash, and by 2024 it is expected that only one third of payments will be made by cash in the UK (CapGemini, 2015).
- 3.3 Emerging technology is expected to further drive the growth of payments, which could increase volumes beyond these estimates. Technological changes, such as the development of the Internet of Things (IoT), has the potential to significantly affect the way that consumers will pay for products, services and utilities but would require fast and scalable payment systems that could accommodate growth without constraints.
- 3.4 Evolving consumer behaviour is also driving the increase in type and volume of electronic payments. As consumers and businesses develop diverse models and patterns, the range and complexity of their needs increase. Consumers and businesses increasingly expect convenience, consistency, choice, and control over how they use payments. Paym, contactless, Apple, and Android Pay are all examples of products which provide new and innovative ways of making payments easier.
- 3.5 In the global context, the UK needs a retail interbank payments system that will give institutions new ways to innovate and keep pace with the speed of digitalisation, and at the same time continue to deliver the resilience and stability that we enjoy now.

But the UK is transitioning towards e-payments

Consumer trends show that customer still rely on cash for many transactions but payments are moving across to Debit cards and other electronic payment methods.



- 3.6 Right now, there are a number of critical initiatives which will affect the payments industry. Some of these are driven by regulation to reduce risk, protect consumers, and/or to drive innovation and competition. Others are led by the industry, looking for better ways to service customers.
- 3.7 Domestic initiatives, such as the Bank of England’s review of its Real Time Gross Settlement (RTGS) System, HM Treasury’s work on Open Banking and the Competition and Markets Authority desire to improve the user experience, all look for new functionality and technology to improve clearing, processing and settlement in payments.
- 3.8 The Payment Services Directive (PSD), and subsequently PSD2, are substantial pieces of payments related European legislation that introduces new services and players to the industry and enhances security and authentication measures. The industry is committed to delivering these requirements despite the UK’s vote to leave the European Union. The impact of ‘Brexit’ on the UK payments system is as yet unclear but the Forum will take into account any developments during the course of the consultation period.
- 3.9 The Bank of England also operates the Real Time Gross Settlement infrastructure (RTGS) providing a risk-free means of discharging payment obligations between different parties Industry bodies, like Financial Fraud Action UK and the Financial Fraud Bureau fight financial crime
- 3.10 The interbank payments systems (for instance Bacs, FPS and CHAPS) facilitate payments made by people and businesses between accounts and card payments facilitate payments made by credit and debit cards (like Visa, MasterCard or Amex).
- 3.11 Each payment system has its own membership, governance, standards and processes run by the PSOs. Standard setting is undertaken by committee and typically proceeds with consensus. PSOs are systemic risk managers and help to keep the systems stable and resilient.

- 3.12 PSPs can access the schemes as direct members or indirect members. Direct members typically hold accounts at the Bank of England and can settle directly over the Bank’s Real-Time Gross Settlement System (RTGS); Visa and LINK permit direct members to settle indirectly. Indirect members pay for the services of indirect access providers (IAPs), also known as sponsors, in order to access clearing and settlement facilities. This often means that a smaller financial institution may have to rely on a competitor to enable it to access the payment systems.

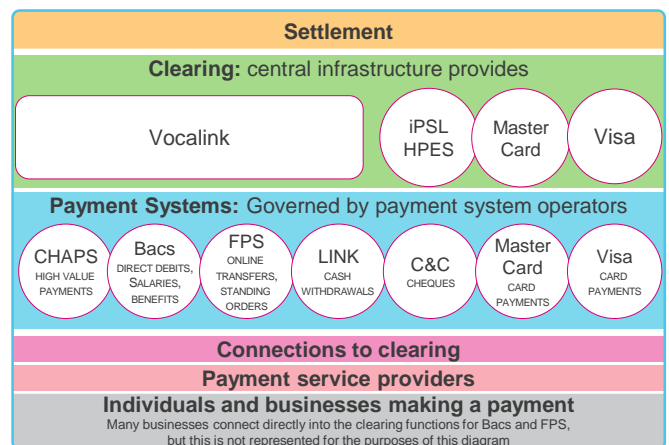
The UK payments landscape

There are many participants in the payments ecosystem that enable us to make and receive payments, and protect consumers and businesses. The UK payments landscape is thus a complex web of relationships with an array of different bodies involved:

The Payment System Operators (PSOs) set the rules that govern the transfer of money between payer and payee. They are regulated by the Bank of England and/or the Payment Systems Regulator (PSR);

Infrastructure providers like VocaLink deliver the hardware, software, network and connectivity to make payments work. They are regulated by the PSR;

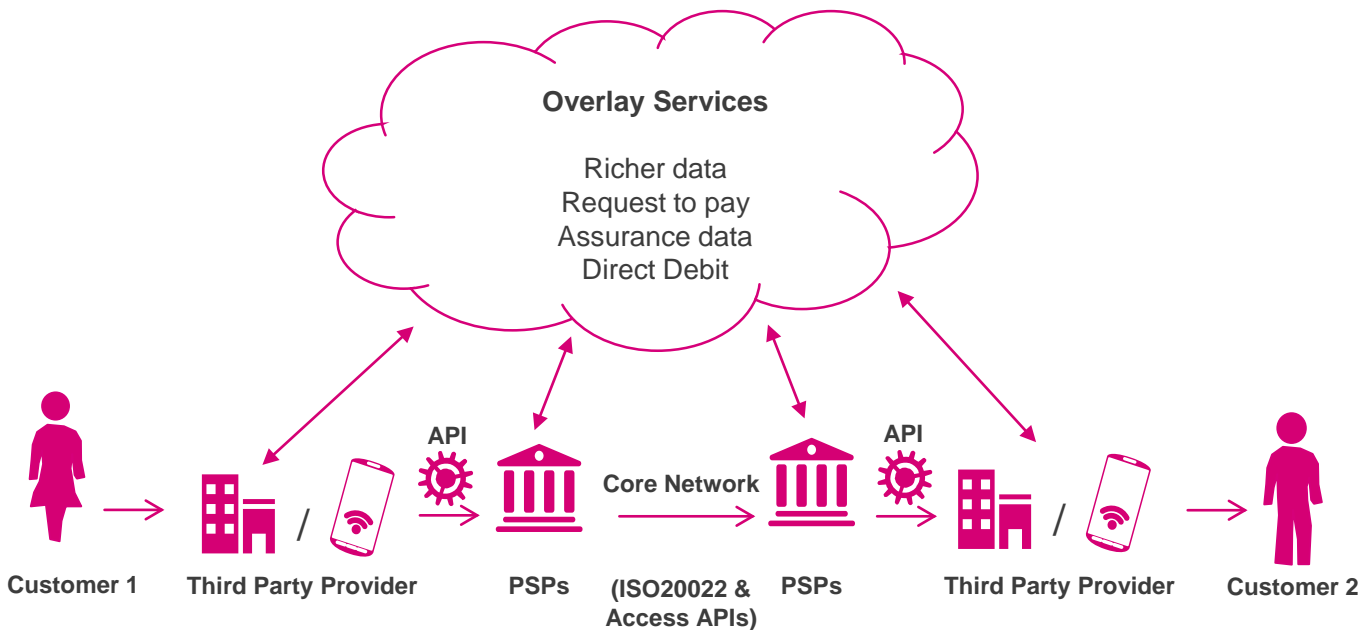
Payment service providers (PSPs) include the banks, building societies, credit unions and electronic money and payments institutions. They are regulated by a combination of the Prudential Regulation Authority, the Financial Conduct Authority (FCA) and HMRC depending on status. Independent ATM Operators are typically unregulated.



The case for change

- 4.1 The current model of payment systems in the UK struggles to meet the evolving needs of a diverse group of consumers and businesses. The UK's underlying payment systems have been developed incrementally over time with different standards over different platforms. The complexity of the current structure means that the industry is not agile, and the pace of collaborative change is only as fast as the slowest participant. Any changes that need to be made to the systems require collaboration among a number of PSPs and other stakeholders. They are time consuming to agree and expensive to implement.
- 4.2 Without the necessary agility, flexibility or versatility, there has been little appetite within the industry to challenge the status quo. The costs and complexity of establishing and maintaining access to each of the schemes are deemed to be excessive as PSPs must conform to all of the differing standards, protocols, and constraints. There is very little ability for PSPs to differentiate the interbank payment products they offer to consumers (for instance, direct debits are the same at every institution), but they can be at a disadvantage if they are not signed up to every scheme. This heightens barriers for entry into the market, potentially hindering competition. It is also difficult to make the business case for investment to improve the current systems as there are no obvious revenue streams resulting from such investment.
- 4.3 Several attempts have been made to address the lack of competition and collaborative innovation in the payments system. Over the past 15 years there have been a number of reviews: Cruickshank (2000), the OFT Taskforce and Cave's internal review of Payments UK (2012). Each underlined the same root problems, but none were able to effect significant change. Recognising these ongoing issues, HMT established the PSR, which was formally launched in April 2015. One of its first priorities was to propose the establishment of the Forum.
- 4.4 We were given 9 months to devise draft proposals and consult with the Payments Community to:
- Develop a long term strategic vision for the payments industry
 - Focus on areas that require the industry to work together to deliver the vision
 - Make recommendations on the key priorities for the industry over the coming years
 - Hold the industry to account for delivery
- 4.5 The PSR made clear at the beginning of our journey that it expected the Forum to provide leadership and clarity of direction for the payments industry, recommending the PSR to use its statutory objectives to enforce our recommendations if it was deemed appropriate or necessary.
- 4.6 Over the last 9 months the Forum has listened to and worked with the community. Our first priority was to identify the problems, or detriments, facing the Payments Community by asking the community for their views. The problems that were presented to us broadly clustered into three themes:
- Problems that affect end users – consumers and businesses
 - Problems that affect Payment Service Providers
 - Problems that are created by financial crime and affect all
- 4.7 **Consumers** want more control over automated payments so that they can choose when to pay and how much to pay. They want greater assurance that their payment will reach the intended beneficiary and they want to be able to confirm the status of a payment once it has left their account. Businesses also want to reconcile and process payments more easily. In other words, consumers require payment services that are versatile and responsive.

- 4.8 **Payment Service Providers** want to reduce the complexity, time, and cost of engaging with the various PSOs. New entrants want easier access and the opportunity to compete on a more level playing field with existing direct PSPs. They require payment systems that are simpler to engage with, open up access to enable competition and drive efficiencies.
- 4.9 **And everyone** wants to participate in a system which is trustworthy and secure. Consumers and PSPs both want a system where criminals can be more easily identified, legitimate users are not excluded wrongly, and the costs of financial crime are kept as low as possible. Everyone requires a system that remains secure and trustworthy in the face of change.
- 4.10 Technology exists which could help PSPs to tackle financial crime. However, the current systems do not easily support the necessary transfer of data that would enable these products to come into being.
- 4.11 This draft Strategy highlights solutions that will make payments more responsive, more trustworthy, and more innovative. We outline how we might make our vision for a new payments architecture a reality, and we offer a roadmap for change. We want to hear whether we have captured your views accurately. We welcome your response to the consultation questions in each of the following chapters.



Responding to consumer and business needs

“We need a new system, a new architecture for payment systems. One that can respond quickly and painlessly when innovators want to develop better products for us... We need the structure to make it happen...”

Ruth Evans, Chair

- 5.1 Payment products should reflect and respond to real people’s needs and not those of an idealised, ‘perfect’ customer that does not exist. They should meet the needs of an increasingly connected world. And, they should be inclusive of the least financially capable wherever possible and be intuitive so that all consumers can use them easily and safely. Payments should operate as efficiently as possible for businesses and government and reduce the time it takes to invoice, pay and reconcile payments.
- 5.2 The Forum recognises that delivering responsive and versatile products and services goes deeper than how well an individual PSP delivers its product. There are challenges in the underlying payments systems that impede the ability of companies to innovate and be responsive.
- 5.3 You can find out more about the proposals in Appendix 3.

What are the needs of consumers, businesses, and government?

- 5.4 The Payments Community was asked to identify consumer and business concerns and to describe the key functionality that consumers businesses and government need and want. The Forum prioritised these, and developed solutions for this set of needs accordingly. As a consequence of this prioritisation, our work has focussed primarily on the interbank payments systems in the UK.
- 5.5 The feedback demonstrated that consumers and businesses want:
 - **Greater control:** customers want greater control over automated payments so that they can choose when and how to pay, in the moment. The current systems are too rigid and inflexible to keep up with the pace of change in the way people live and work.
 - **Greater assurance:** both consumers and businesses want a way to track payments once they are made so they can guarantee they reach the intended recipient and avoid fraud. They want real-time balance information to help them manage cash flow better.

- **Enhanced data:** businesses and government departments are often not able to access the data that allows them to fully understand what a payment relates to. This results in significant reconciliation work for corporates, government and small businesses. It also makes liquidity difficult to manage.

- 5.6 In addition, PSPs also want to be able to improve their understanding and responsiveness to financial crime in the system. They need more data to help them do that. This is addressed in Chapter 6.

Consultation Question 1

- Do you agree we have properly captured and articulated the needs of End Users? If not, what needs are missing?

Our design principles

- 5.7 We have defined a set of financial capability principles for payments design and delivery (Appendix 5) to ensure that the needs of the most vulnerable people are always met. We believe that the industry should voluntarily adopt these to ensure the interests of these people are protected in the design and delivery of future industry developments.

What is a vulnerable consumer?

The FCA defines a vulnerable consumer as “someone who, due to their personal circumstances, is especially susceptible to detriment, particularly when a firm is not acting with appropriate levels of care

Consultation Question 2

- Do stakeholders agree with the financial capability principles?
- How should these principles be implemented?
- How their implementation should be overseen and how should the industry be held to account?

Consumers want greater control: Request to Pay

The problem

5.8 The issues raised by the Payments Community and existing research shows that although current payment options work well for the majority of end users, lack of control over payments remains a major concern for some end-users, including both payers and payees. Current Pull and Push payments are not responsive enough to the needs of payers and receivers - especially in a modern labour and SME market where variable income and trading receipt patterns are increasingly the norm.

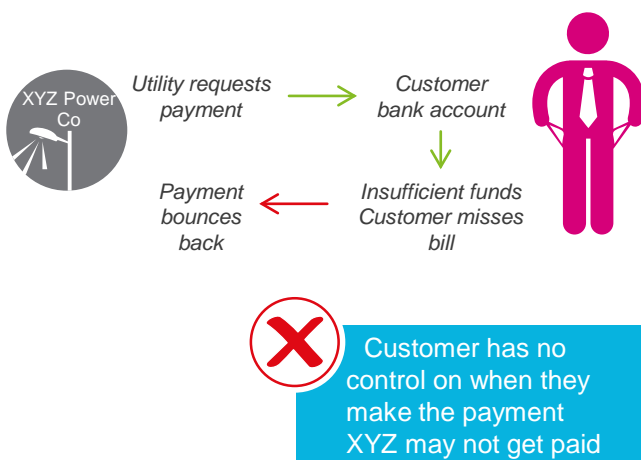
Our solution: Request to Pay

- 5.9 Request to Pay is a new payment instrument that would enable businesses and consumers to create and send payment requests. Recipients of these requests could decide if, how and when they want to respond with a payment.
- 5.10 This solution will provide consumers and businesses, including the charity and voluntary sectors, with more control over the timing of their payments and would deliver increased choice.

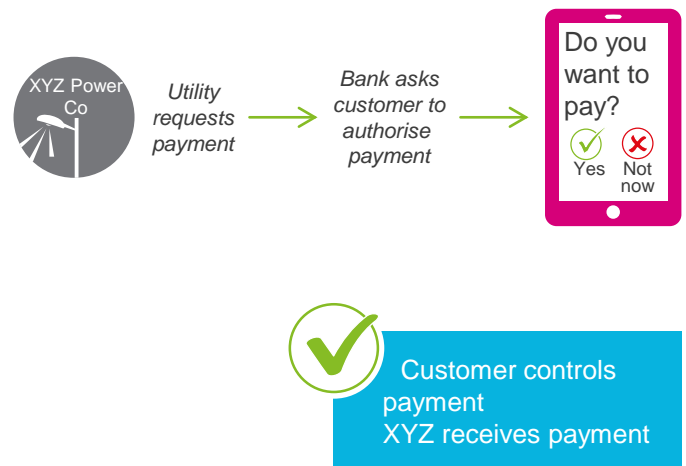
Potential Risks to Consumers

- 5.11 The functionality provided by the payments system which could benefit consumers and businesses may still create additional risk because individual PSPs and corporates may decide to deliver the functionality in unexpected ways.
- 5.12 It is possible that Request to Pay may not be deployed in a way which vulnerable consumers could use. For instance, Firms may not be willing to allow the postponement of a bill for the length of time that a customer may wish to postpone it and 'Request to pay' may incur a charge for use.

Problem



Solution



Responding to consumer and business needs (cont.)

Consumers want greater assurance: Assurance Data

The problem

5.13 The issues raised by the Payments Community and existing evidence shows that users feel vulnerable to the risk of a payment being either misdirected or lost due to the lack of accurate information about the exact identity of the payee and the status of the payment. This reduces the incentives for end users to take advantage of the benefits of paying electronically.

Our solution: Assurance Data

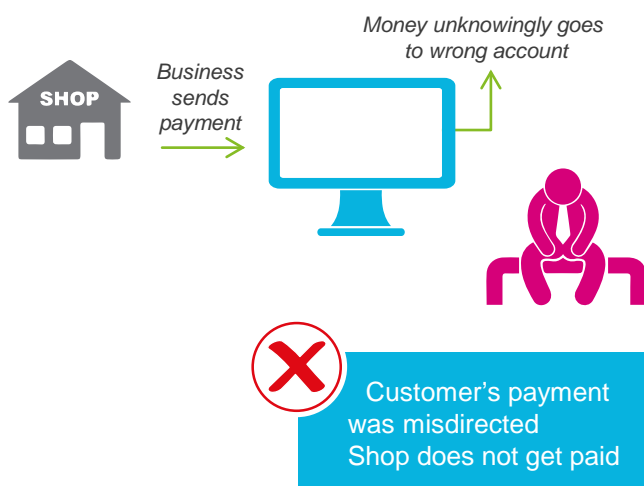
5.14 Assurance Data is information which can be included with a payment to provide assurance that the payment is going to the intended recipient. It could also provide real-time balance information and the intended time of the transaction completion.

5.15 This solution will give end users more assurance that their intentions in originating or requesting payments were followed through. This goes beyond just the specifics of avoiding misdirected payments, but the prevention of any outcome other than that intended by either payer or payee.

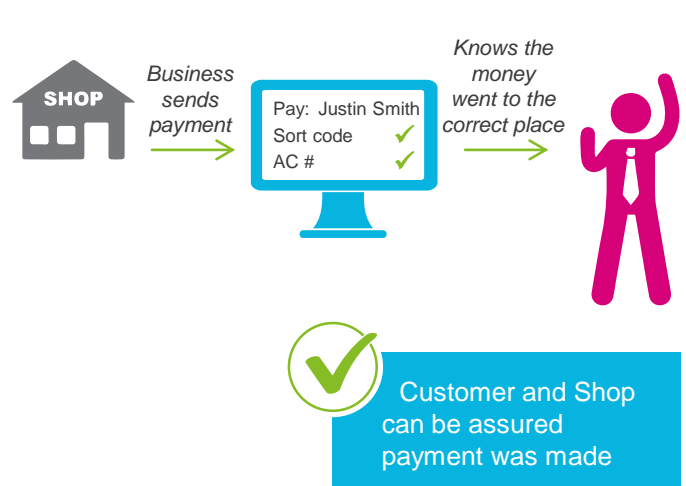
Potential Risks to Consumers

5.16 The Forum has not identified any potential risks to this solution.

Problem



Solution



Business and Government departments want Enhanced Data

The problem:

5.17 The issues raised by the Payments Community and existing research shows that users would like to include more data within an electronic payment, rather than it being sent separately and matched with the payment by the payee before it has a complete picture of what the payment relates to.

Our solution: Enhanced Data Capability

5.18 Enhanced Data is the capacity to attach data to a payment to allow a recipient to easily identify what the payment relates to. This will enable an end user, typically a business or a third party such as government departments, to accurately reconcile the payment with their internal systems.

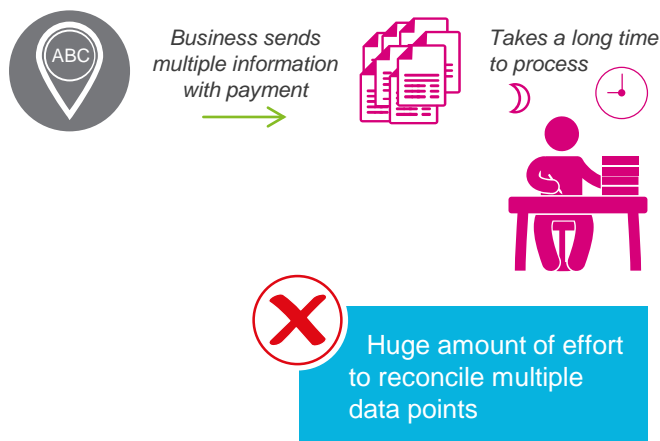
5.19 Linking more and better information to a payment would deliver a significant improvement to the payments experience, while also unlocking the potential for additional benefits to be delivered. It also has the potential to address some of the control and assurance needs of end users identified above.

Potential Risks to Consumers:

5.20 There are many benefits associated with enabling more information to travel with payments. However, data privacy and data protection considerations are important. Marrying these payment functionalities with data analytics and real-time payments could cause real harm to consumers or potentially undermine the ability of consumers if payers control how payments are used.

5.21 The Forum has designed its financial capability principles to mitigate these problems.

Problem



Solution



Consultation Question 3

- What benefits would you expect to accrue from these facilities (not necessarily just financial)?
- Do you agree with the risks we outline? How should we address these risks? Are there further risks we should consider?
- Is there a business case for investing in solutions to address these needs and if not, how such an investment can be justified?
- Are there any other alternative solutions to meet the identified needs?
- Is there anything else that the Forum should address that has not been considered?

Responding to consumer and business needs (cont.)

Delivering what consumers, businesses and government need

- 5.22 The Forum recognises that some of the functions that consumers want are being developed by existing PSOs or are already available. For instance, FPS has researched a 'Request to Pay' product and confirmation of payee is available on Paym for mobile payments. However, the current systems will struggle to deliver better customer control or enhanced data services.
- 5.23 The dilemma about how to address customer needs quickly has been at the centre of the Forum's debates. The current systems do not facilitate changes efficiently. Investment in a long term strategy is required to address this problem.
- 5.24 We recommend a new payments architecture is built on new technology, so that in future, when new needs arise, the system will be agile and respond more quickly and efficiently. This new structure will utilise End User Application Programming Interfaces (APIs) and Open Access APIs to simplify connectivity and provide the framework for innovation. This is explained in more detail in Chapter 8 and the supporting annexes.
- 5.25 Some functions, like confirmation of payee, can be provided with the delivery of the Open Banking APIs. Request to Pay would require additional work and is expected to be a similar project in magnitude of the Paym change programme. The existing systems would not easily provide for assurance data or enhanced data. While this may require most consumers and businesses to wait until the new architecture proposed by the Strategy is in place, this does not rule out the possibility of competitive solutions developing in the shorter term. Putting the new architecture for payments in place should allow all PSPs to innovate to create the products desired by end users outlined above.

Consultation Question 4

- Is there a business case for investing in transitional solutions while the new payments architecture is being delivered and if not, can such an investment be justified?
- Are there any viable technical solutions to deliver some of the consumer benefits early without compromising the longer term solutions recommended by the Forum?

Account Number Portability

- 5.26 The Forum was asked, as part of their work, to undertake a review of Account Number Portability. The proposed solution is to allow a customer to keep their sort code and account number when moving from one Payment Service Provider to another. This approach is very similar to a customer keeping their mobile phone number when switching provider.
- 5.27 It has been widely thought that many customers do not take advantage of potential savings and/or product benefits from switching accounts because they think that the task is too difficult and it will result in failed payments both into and out of their account.

The Forum's view

- 5.28 Whilst further cost benefit analysis could be undertaken, the Forum considers this analysis unlikely to result in a recommendation to proceed with Account Number Portability and at this stage the resource and time would be better invested in delivery of the other solutions identified. The Forum believes that:
- Previous analysis undertaken has indicated that the estimated costs to deliver the solution are extremely high and likely to outweigh the benefits, which will be delivered to consumers through increased competition.
 - The resource required will be significant and can be better placed to deliver the solutions outlined by the Forum.
 - The changes in technology and solutions proposed by the Forum will deliver the competition and innovation that Account Number Portability was perceived to achieve.
- 5.29 The rationale and a link to the further detail behind this view can be found in Appendix 3.

Costs and benefits

The following types of costs and benefits have been identified.

Identified Benefits	End Users <ul style="list-style-type: none"> The proposed changes will enable users to better manage their money and provide the control and assurance they want It will bring significant benefits to business and government, enabling them to reduce operating costs, for example reconciliation and debt management
	Payment Service Providers <ul style="list-style-type: none"> The changes will enable PSPs to deliver their to customers better services and products, leveraging the data that is associated with payments
	Industry <ul style="list-style-type: none"> In the long term it the increased use of electronic payments may provide significant efficiencies across the UK economy and enable much closer management of the overall risks associated with payments
Identified types of costs	One-off – Time and resource <ul style="list-style-type: none"> Collaborative time and resource to support an industry body that is coordinating the implementation of governance PSP time and resource to implement the API solutions, which include the end user functionality (e.g. Request to Pay) Corporate entities time and resource to implement the changes to functionality and process, which support the proposed solutions
	One-off – Technology and Other investment <ul style="list-style-type: none"> Potentially PSO investment in existing infrastructure to support the proposed functionality'
	Ongoing costs <ul style="list-style-type: none"> Central costs for maintaining and operating the changed infrastructure and central governance PSP costs for maintaining and operating the new functionality implemented as well as governance mechanisms

Improving trust in payments

“In this climate of increasing cyber-crime we need to make sure everyone is kept safe.”

Ruth Evans, Chair

- 6.1 The UK is a leader in payments with an excellent record on security and resilience, but technology and the methods criminals use to exploit any weaknesses in the payment system are becoming more sophisticated. Our Strategy proposes that the industry collaborates with others to fight crime and engender trust in payments.
- 6.2 Criminals exploit weaknesses in the payments system to obtain money, goods, and/or services illegally, and to transfer funds that in turn enable criminal activity. These activities harm all end-users of payments: individuals, businesses, charities and government and public sector organisations. They also cause direct loss to PSPs.
- 6.3 In order to address these concerns, we propose six strategic initiatives which would require the industry, users of payment systems and relevant authorities to collaborate. These are:
- Supporting the delivery of a more joined-up approach to education and awareness raising
 - Creating guidelines for managing identity verification and authentication.
 - Establishing a capability for Big Data analysis of payments transactions moving between PSPs, to better identify fraudulent and criminal payments activity.
 - Sharing more financial crime intelligence data between payments providers.
 - Establishing a shared utility for Know-Your-Customer (KYC) background checks for business customers.
 - Enhancing the quality of data on the industry's sanctions lists.
- 6.4 We recognise that the industry, government and authorities are increasingly joining up their approach to dealing with fraud, risk management for money laundering and sanctions compliance. To deliver our initiatives we will need to take a similar approach.
- 6.5 You can find out more detail about our initiatives in Appendix 3.

Customer awareness and education

The problem:

- 6.6 A priority issue in financial crime is the ability of consumers and businesses to identify and understand the methods by which criminals seek to exploit them in order to obtain or launder money. They need to better understand the steps they should take to reduce the risk of becoming a victim or unwittingly participating in financial crime.

Our solution: Supporting the delivery of a more joined-up approach to education and awareness raising

- 6.7 Our Strategy proposes a joined-up approach to consumer awareness and education. There is already a significant amount of activity underway to deliver awareness and education campaigns. We propose that one of the trade associations should take the lead on delivering more co-ordinated and streamlined activities, thus avoiding unnecessary duplication and cost.
- 6.8 This can reinforce the efforts to further equip consumers with the right tools to protect themselves and increase confidence and usage of electronic payments. Although awareness and education alone will not resolve financial crime alone, it is a crucial to keep consumers as informed as possible.

Potential risks to consumers:

- 6.9 No significant risks to consumers have been identified.

Consultation Question 5

- Do you agree with our proposal regarding customer awareness and education? If not, please provide evidence to support your response.
- Do you agree the delivery of these activities should be through an industry trade body? If so, which one would be most appropriate to take the lead role?

Guidelines for identity verification, authentication and risk assessment

The problem:

6.10 Currently, different organisations have different processes and systems for initial and on-going identity verification. There is no common language across the industry for describing the identification, verification and authentication process. Consequently there is little consistency in approach. This means that end users' experiences differ according to the PSP they are interacting with. One form of identification may be acceptable to one bank, but not to another.

Our solution:

6.11 Our strategy proposes delivering guidelines on the nomenclature that should be used by individual PSPs to establish a common approach to identification and verification. The guidelines will also cover the acceptability, validation and verification of identity evidence that may be presented by an individual. Secondly, we propose to assess existing initiatives that are focused on developing a National Digital Identity (for example gov.verify). We will support those which could be expanded to the commercial sector.

Potential risks for Consumers:

6.12 No significant risks to consumers have been identified.

Consultation Question 6

- Do you agree with the establishment of guidelines for identity verification, authentication and risk assessment? If not, please provide evidence to support your response?

Payment transaction data sharing and data analytics

The problem

6.13 The UK payment industry creates a very large, high quality dataset through the processing of payments. The emergence of more sophisticated ways to handle and query large amounts of data has opened up the potential for the industry to better exploit this 'big data' set to determine trends or actual financial crime being committed.

Our solution

- 6.14 Our Strategy proposes the introduction of transaction data sharing to support collaboration and data sharing between the PSOs and PSPs who own the data; and data analytics capabilities to manipulate the data and extract insights relating to priority financial crime use cases. The Strategy proposes that the industry undertakes a detailed assessment of this capability and puts in place an implementation plan if appropriate.
- 6.15 This could enable the identification of, and reduction in, mule accounts, increased ability to repatriate funds to the victims of crime and the flexibility to be updated rapidly to respond to the fast-changing approaches taken by criminals.
- 6.16 We have considered different options to create and maintain data sharing and analytical capabilities. Whilst at this stage it is recommended that a central data repository and centralised analytical capability is adopted, further analysis is required to determine the most appropriate solution. This will also enable the costs and the associated benefits to be better understood.

Potential risks for consumers:

- 6.17 Creating a central repository of data creates new risks related to how secure the data storage facility is. The use of the data would also need to be protected for detecting financial crime only and not used by firms for purposes beyond which it was intended, for instance, marketing. There are also a number of legal issues, which would need to be addressed, for example data privacy and the Data Protection Act.

Consultation Question 7

- Do you agree with our solution to develop a central data repository for shared data and a data analytics capability? If not, please provide evidence to support your response?
- Do you agree with the potential risks we outline? How should we address these risks? Are there further risks we should consider?
- If any legislative change is required to deliver this solution, would such change be proportionate to the expected benefits?

Improving trust in payments (cont.)

Financial Crime Intelligence Sharing

The problem

- 6.18 There is currently limited interaction to work collectively to safeguard customers. It is believed that the more intelligence that is shared, the higher the chance that PSPs can deter and prevent criminal activity in the payments systems.

Our solution

- 6.19 Our Strategy proposes that the industry adopts an intelligence sharing initiative that would be an enhanced form of data sharing, involving human intervention to decide how the data should be used to create trends, typologies and files about criminal activity. It could also include flagging of persons noted to be prosecuted fraudsters as well as suspected fraudsters or potentially vulnerable consumers who might need more protection.
- 6.20 Our Strategy also proposes that the industry builds a single view of confirmed, suspected and attempted fraud data and other financial crime data, subject to a robust legal framework. In due course the combined view of confirmed, suspicious, attempted and at-risk fraud data events can be fed into the shared analytical capability to prevent payments before the money leaves the system.
- 6.21 This could enable greater financial inclusion, since better intelligence should reduce the number of customer exclusions due to better refinement of risk models; better ability to identify and serve vulnerable consumer and a reduction in financial crime for all industry participants, driven by 'joining the dots' for criminal activity and suspicions across all PSPs.
- 6.22 However, there are several barriers to making this happen, including regulations such as data sharing restrictions, 'tipping off' risk, data privacy, data protection and the Proceeds Of Crime Act. The Forum proposes further work is undertaken to proceed with the sharing of typologies and trends for AML and other financial crime, extending the existing light registry / central repository. For Fraud typology sharing, the recommendation is to extend existing arrangements beyond the exclusive memberships of, for example, Financial Fraud Action UK or CIFAS.

Potential risks to consumers:

- 6.23 There are risks to consumers from sharing this type of data. Labelling people wrongly can cause significant issues as we note for those who are wrongly the victims of forced account closure.

Flagging 'suspicious' accounts of people who have not been prosecuted for criminal activity may be considered unfair or inappropriate. While such profiling may improve inclusion it also makes the decision to exclude more detrimental than might have otherwise been the case and it challenges rights to privacy.

- 6.24 Careful governance, in particular for intelligence sharing, would need to be created to ensure that this process delivers the outcomes anticipated, without creating additional risk. The establishment of this governance will need to involve expert groups, such as the new banking trade body, National Crime Authority, City of London Police, and legal advisers.

Consultation Question 8

- Do you agree with our solution for financial crime intelligence sharing? If not, please provide evidence to support your response?
- In what way does this solution improve financial inclusion? More generally, how should the intelligence sharing be used for the "public good"?
- Do you agree with the potential risks we outline? How should we address these risks? Are there further risks we should consider?
- Do the benefits of financial crime intelligence sharing outweigh the new potential risks created?
- Can this operate without changes to legislation? If not, what changes to legislation would be required to make this happen? If any legislative change is required, would such change be proportionate to the expected benefits?
- What governance structure should be created to ensure secure and proper intelligence sharing?

Trusted KYC data sharing

The problem

- 6.25 Know Your Customer (KYC) is the due-diligence and regulations that financial institutions must perform on business customers before agreeing their accounts. The current method of implementation is costly to operate, contains significant duplication of work for the business in form filling and for the PSP in processing. It has negative impacts on both the financial institutions and the customer, who are often delayed in undertaking genuine business activity.
- 6.26 Current gaps in the KYC processes allow financial crime to continue which undermines a number of business activities in the whole economy.

Our solution

- 6.27 Our Strategy proposes the creation of a Central KYC Utility, focusing on business customers, that consolidates specific, non-competitive KYC information into a shared services utility structure for member PSPs. A central repository will also be established to store the data and documents required to support a financial institution's KYC procedures.
- 6.28 This could enable improved compliance with AML policies; reduced delays, improved service experience for valid customer transactions; fewer false positives; higher success-rate in identifying high-risk customers and transactions; easier integration into the wider global KYC ecosystem, enabling more cross border collaboration and reduced costs for the industry, increasing the efficiency for KYC, Fraud, AML and Sanctions processing.

Potential risks to consumers:

- 6.29 The main risk is the possibility that inaccuracies are wrongly captured on application and passed on to the next financial services provider. Some form of 'corporate identity' may also need to be captured so that businesses can authenticate themselves to new providers based on the identity already provided. This would need careful design to avoid the creation of new potential weaknesses to the system.
- 6.30 Further consideration of the scope and business case for this proposal will need to be undertaken. This will determine the most appropriate design and enable risks and dependencies to be better understood.

Consultation Question 9

- Do you agree with the proposal to develop a Central KYC Utility? If not, please provide evidence to support your response?

Enhancement of Sanctions Data Quality

The problem

- 6.31 Customer on-boarding relies on good data quality to enable PSPs to screen them against the HMT sanctions list. While Payment Service Providers acknowledge there has been progress in this area, they remain concerned that some of the identifiers on the HMT list are not sufficiently specific and as a result the process undertaken is inefficient, leading to delays in genuine business activity.

Our solution

- 6.32 Our Strategy recommends the industry pursue HM Treasury for the adoption of the new Advanced Sanctions Data Model that has been developed by the UN Security Council Committee, to enhance the quality of the Sanctions List entries and thus their effectiveness in use.
- 6.33 The Strategy also proposes that the payments industry engage with HMT in order to: perform a sanction data assessment to detect issues for existing unverified data and resolve problems identified, improve the population of accurate data within sanctions lists; create a single common and consistent Sanctions list; define a set of common standards and industry practices by PSPs regarding the use of attributable information for screening investigations. Together these would improve detection capabilities and also reduce the frequent errors that find their way onto Sanctions Lists.

Potential risks to consumers:

- 6.34 No significant risks to consumers have been identified

Consultation Question 10

- Do you agree with our solution for enhancing the quality of sanctions data? If not, please provide evidence to support your response?

Improving trust in payments (cont.)

Costs and benefits

The following types of costs and benefits have been identified across all the solutions in Chapter 6.

Identified Benefits	End Users <ul style="list-style-type: none"> Enhanced security measures and collaboration with other parties should enable better protection for End Users from financial crime, e.g. account takeover, identity theft and account misuse and the resulting administration and worry The central KYC repository should allow for an improved experience when an End User tries to open an account or requests credit
	Payment Service Providers <ul style="list-style-type: none"> The potential reduction in financial crime should mean an improved service to customers and lower operational costs The adoption of a better standard that is accepted internationally should allow for easier integration with international payment operations
	End Users <ul style="list-style-type: none"> The potential reduction in operational costs could enable increased investment in other business enhancements and/or greater return to investors Less time spent tackling financial crime should allow government agencies to focus resource elsewhere
Identified types of costs	One-off – Time and resource <ul style="list-style-type: none"> Collaborative time and resource to support the commissioning and development of the solutions and agreement of governance and standards PSP time and resource to support the implementation of the 'technical standard', (i.e. guidelines) the transactions data sharing and data analytics solution and the enhanced data sanctions list Regulator and government time and resource to support the implementation of the enhanced data sanctions list
	One-off – Technology and Other investment <ul style="list-style-type: none"> There is likely to be a range of technology related investment related to these solutions. Potentially this will include: investment in a centralised data sharing and data analytics capability and a central KYC utility. These costs will both be incurred collaboratively and at a PSP level There is likely to be further collaborative investment to commission the development of a 'technical standard'
	Ongoing costs <ul style="list-style-type: none"> Regulator and government costs of supervising the PSPs implementation of the guidelines Collaborative costs of maintaining the guidelines as well as operating and maintaining the central data sharing and data analytics solution and the central KYC utility PSP operating costs to support the provision, digestion and analysis of data for the central data sharing and data analytics solution and central KYC utility

The payments community identified the following requirements for PSPs

Simpler access

- New PSPs require simpler access to the payment systems so they can compete on a level playing field

Simpler ways to deliver change

- PSPs and PSOs have to collaborate to enable any changes to the system they might want to make. This makes change slow and challenging to deliver

A strategy for modernisation

- PSPs want a modern system that allows them to compete internationally

The challenges to delivering these requirements

- There are pre-requisites necessary for becoming a direct PSP of some PSOs (for example, the requirement to have a sort code and settlement account at the Bank of England)
- There are multiple interbank PSOs to negotiate changes with
- There is no standardisation across PSOs, which makes engagement complex, time consuming and thus costly

Simplifying access to promote competition

“The future system needs to be modern and open to new entrants so there’s more competition and dynamism in payments...”

Ruth Evans, Chair

7.1 The Forum has reviewed where collective action can promote innovation or downstream competition in a way that will benefit PSPs and ultimately, customers. Payment systems should offer simple and open access, appropriate to the PSP’s needs and the level of risk to the payments system. PSPs should be able to reach other PSPs simply and affordably. Messaging should be modern and align with international standards to enable other providers to enter the market and increase competition between PSPs, and infrastructure and network providers.

7.2 In order to address these concerns the Strategy has identified a range of solutions to reduce barriers to entry for new participants in the payments system to enable increased competition in the market. Our proposals are designed to deliver simplified and standardised access to PSOs, increased interoperability, and clearer and more consistent governance. This should lead to simpler and more flexible access options for PSPs, in turn supporting increased competition and better outcomes for service users.

7.3 We recognise that some solutions have already been considered by industry and in some cases are already underway. The Forum’s Strategy should give additional impetus to this work. The short term initiatives we have identified are:

- Providing independent access to sort codes.
- Providing more accessible settlement account options.
- Enabling aggregator access models to payment systems.
- Establishing common payment system operator participation models and rules.
- You can find out more detail about these proposals in Appendix 2.

7.5 For the longer term, the Strategy proposes three strategic solutions that will further simplify access to the payments market and align with the Forum’s vision of a new payments architecture for UK payment systems. Our own strategic solutions for the simplification of access are:

- Establish a single entity by consolidating three interbank PSOs.
- Move the UK to modern payment message standards.
- Clarify liability models for PSPs who do not directly access the payment systems.

You can find out more about what we are proposing and why in Appendix 3.

Short term initiatives

Access to sort codes

The problem

7.6 New PSPs that wish to connect directly to a payment system must use a sort code. Sort codes are a key routing mechanism for retail payments in the UK. They act like the postcode does in a postal address. Until very recently, obtaining a sort-code could present difficulties because new PSPs were required to obtain one from within the range of an existing direct participant. In addition, there were restrictions on the use and transfer of sort codes that constrained new participants. A new PSP had to ask a competitor for a sort code, which could cause a barrier to entry.

Our solution

7.7 Our Strategy supports the work that Basics has commenced, in its role as operator of Bank Reference Data, to make available a new ‘utility’ sort code range. Further work is underway to improve the availability of sort code information, on an independent and transparent basis.

Consultation Question 11

- Do you agree with our proposal regarding access to sort codes? If not, please provide evidence to support your response

Accessible settlement accounts

The problem

- 7.8 Certain payment systems (e.g. Bacs, CHAPS, Cheque & Credit and FPS) require direct system participants to hold a settlement account at the Bank of England (BoE). However, current BoE restrictions mean that PSPs which are not a bank or a building society cannot obtain an account in RTGS². The PSPs who are not in these categories are therefore currently precluded from being direct participants in these systems.

Our Solution

- 7.9 Our Strategy supports the BoE's announcement that it intends, over time, to extend direct access to accounts in RTGS to non-bank PSPs³. By extending RTGS access, the Bank's stated objective is to increase competition and innovation in the market for payment services. As access is extended, resilience will also be safeguarded. Both the FCA and HMRC, who together supervise non-bank PSPs, are committed to developing a strengthened supervisory regime for those who apply for an RTGS settlement account.

Consultation Question 12

- Do you agree with our proposal regarding access to settlement account? If not, please provide evidence to support your response

Aggregator access models

The problem

- 7.10 In order to connect to each payment system, PSPs have to develop specific technology solutions to connect to each PSO. This means that both direct and indirect market participants need to have multiple solutions to connect to the interbank payment systems which add to both cost and complexity.

Our Solution

- 7.11 Our Strategy proposes encouraging the development of more commercial and competitive access solutions like aggregators. They will be accredited for use by, or on behalf of the PSOs

and will be capable of supporting both direct and indirect access to any PSO through a single gateway. Aggregator operators will assess whether there is market demand for them to offer these services to multiple PSOs. These services would form an integral part of the future payment system. This model is already live for FPS and will be operational during 2016. Bacs is currently in the process of consulting on an appropriate model.

- 7.12 This solution would be an interim step to the new payments architecture set out in Chapter 8. Aggregators do not provide the full range of benefits we envisage for the future of payments. However, through competition they could be capable of providing a better connectivity layer for PSPs in the meantime. Aggregators, perhaps working in partnership with sponsors, could provide more sophisticated services, thereby offering a real alternative to indirect sponsorship models.

Consultation Question 13

- Do you agree with the proposal regarding aggregator access models? If not, please provide evidence to support your response.
- How can the development of more commercial and competitive access solutions like aggregators be encouraged to drive down costs and complexity for PSPs?

Common Payment System Operator participation models and rules

The Problem

- 7.13 There is currently no common entry point for access to PSOs and no standard on-boarding process. There are different rules, requirements and terminology for each payment system operator. A PSP wishing to access multiple schemes must navigate each of these different on-boarding processes. The result is an increase in time, complexity and cost.

² Accounts are also available to broker-dealers, central counter parties and systemically important financial market infrastructures. See <http://www.bankofengland.co.uk/markets/Documents/paymentsystems/boesettlementaccounts.pdf>

³ <http://www.bankofengland.co.uk/publications/Documents/speeches/2016/speech914.pdf> or <http://www.bankofengland.co.uk/markets/Documents/paymentsystems/rtgsblueprintupdate.pdf>

Simplifying access to promote competition (cont.)

Our Solution

- 7.14 The proposed solution is to have a common PSO participation model unless there is justification to retain a different approach. The common model will cover areas such as:
- Terminology.
 - Eligibility criteria and baseline regulatory requirements.
 - Categorisation of participants and products offered by Payment System Operators.
 - On-boarding processes and migration to common connectivity models.
 - Simplification in assurance.

Consultation Question 14

- Do you agree with our proposal regarding Common Payment System Operator participation models and rules? If not, please provide evidence to support your response.

Strategic simplification of access

Establishing a single entity

The problem

- 7.15 One of the issues identified by the Payments Community was that multiple payment systems are unnecessarily complex, time consuming, and costly for PSPs to join and participate in. This acts as a barrier to direct entry for PSPs, which in turn restricts competition in the downstream market. The structure is also considered inefficient, because PSPs currently undertake work which is likely to be duplicated across the separate payment systems.

Our solution

- 7.16 To address these problems, the Forum recommends consolidating three of the interbank PSOs: Bacs, C&CCC and FPS. Further consideration needs to be given on whether it is appropriate to include the non-core services that these operators are responsible for. You can read more about the Forum's deliberations in Appendix 3.
- 7.17 Based on the consultation responses further analysis of the benefits that could be achieved and the costs involved will be conducted prior to the publication of the final Forum Strategy. The PSR and BoE, will work collaboratively with the PSOs to explore the best way forward, leading to a detailed plan for implementation of this solution.

Consultation Question 15

- Do you agree this proposal regarding establishing a single entity? If not, please provide evidence to support your response.
- If you do not agree, how else could the benefits be achieved without consolidating PSO governance in the way described?

Moving the UK to a modern payments message standard

The problem:

- 7.18 The UK PSOs each operate using various payment message types. This has two main impacts: firstly the message types are UK specific, while globally, countries have recognised the benefits of moving to the ISO20022 standard; secondly the variety of standards and higher complexity stifles innovation.

The solution:

- 7.19 The Forum proposes that the UK adopts the ISO20022 messaging standard. FPS and Payments UK have already undertaken a significant amount of work to map these data standards to the PSOs. This short term action should continue. However, it should now also be aligned to the new payments architecture outlined in Chapter 8.

Consultation Question 16

- Do you agree with the proposal to move the UK to a modern payments message standard? If not, please provide evidence to support your response

Indirect access liability models

The problem

- 7.20 PSPs who require payment system access but who do not wish to directly participate must gain access to a bank account via an Indirect Access Provider. There remains a lack of clarity about how liability and accountability (for example, for applying AML rules to end customers) is divided between the Providers and Indirect PSPs. This has left Providers with the view that they are overly exposed to risk. This market restriction makes it more difficult for Indirect PSPs to gain access to bank accounts to support payment systems access. to the payment systems.

The Solution

- 7.21 The Forum recommends that enhanced guidance is provided for both Providers and Indirect PSPs, so that accountability is clearly established and understood in Indirect Access Models. The development of the guidance will require close collaboration between the industry and regulators. This guidance should assist in clarifying the potential risks and liabilities for Providers, potentially encouraging more to offer services to Indirect PSPs.

Consultation Question 17

- Do you agree with the proposal to develop indirect access liability guidance? If not, please provide evidence to support your response.
- What, in your view, would prevent this guidance being produced or having the desired impact?
- In your view, which entity or entities should lead on this?

Costs and benefits

Across the solutions identified a range of different types of costs are likely to be incurred. These are outlined in the table below

Identified Benefits	<p>Payment Service Providers</p> <p>New and existing PSPs will be delivered a range of benefits from the proposed changes. These include:</p> <ul style="list-style-type: none"> • Reduced barriers to entry, in particular with regards to technology and specialised knowledge, which is currently required • Better risk management and the associated reduction in controls and assurance • Reduced costs and the level of expertise required from all participants, in particular as payments become more of a service. The changes will also provide the flexibility that PSPs require • Opportunity for more PSPs to offer indirect access and differentiate their service
	<p>End Users</p> <ul style="list-style-type: none"> • As a result of the increased competition, end users are likely to have more choice in the service and products that they are offered • Business and government end users are likely to benefit from reduced pricing, which further competition can enable
	<p>Industry benefits</p> <ul style="list-style-type: none"> • The changes proposed will enable risk management throughout the end-to-end landscape to be better understood and therefore managed • It should align with international standards enabling international interoperability and potentially competition within infrastructure providers • The changes will also allow further competition not only between PSPs but also between infrastructure and network providers
Identified types of costs	<p>One-off – Time and resource</p> <ul style="list-style-type: none"> • PSP internal changes to their current practices and procedures to align processes. There will also be consideration and implementation of proposed long term changes within their processes • PSO time and resource to support the amendments to current processes and systems to align these. This will also require change from their infrastructure providers. The PSOs will also need to support transition and implementation of a new PSO Governance structure • Collaborative time and resource, including PSP and PSO to support the changes necessary to agree commonality across schemes • Collaborative effort will also be necessary to drive forward solution implementation, in particular for PSO Governance and message standards • Regulator and government may also be required to invest time and resource to support agreement of legal and regulatory changes
	<p>One-off – Technology and Other investment</p> <ul style="list-style-type: none"> • There is likely to be a range of technology related investment related to these solutions. Potentially this will include: investment to align infrastructure with simplified rules; and change to message standards across payment schemes • There may be further investment required in promoting the changes to ensure industry and customer awareness of the impact of these changes
	<p>Ongoing costs</p> <ul style="list-style-type: none"> • Regulator and government costs

A new architecture for payments

“We’ve got the technology to do it now. The regulators are ready. We just need the structure to make it happen...”

Ruth Evans

- 8.1 We have a vision for a new architecture for retail interbank payments. We call this the ‘Simplified Payments Platform’ (SPP). It is the culmination of a number of our initiatives. The SPP will deliver greater competition and more innovation at lower costs. It will be agile and respond quickly to the needs of consumers, businesses and government.
- 8.2 The Simplified Payments Platform (SPP) is the embodiment of our long term vision for payments. It is a new layered architecture for payments which can be delivered through a number of strategic initiatives:
- A layered model for payments processing
 - Common messaging standards, Open Access APIs and API Governance
 - A Simplified Delivery Mechanism
 - Overlay services
- 8.3 Some of the proposals we outlined earlier in this draft Strategy are stepping stones towards implementing these strategic initiatives. The SPP requires further detailed work and we are committed to delivering a study by 2018 that will specify the new architecture in detail, assess the costs and benefits, and, as appropriate, outline an implementation plan.

Layered architecture

- 8.4 Currently it is very difficult to make changes to payment systems without impacting all who use them. Multiple participants (some of whom will be competitors) have to collaborate on any changes, agree implementation and testing. It makes the current system slow to change and acts as a brake on innovation.
- 8.5 The layered architecture approach is established best practice in IT and in particular in the telecoms sector where end-to-end systems are built in layered stacks. Importantly each layer has functions to isolate capabilities from the layer above and below it. This means that it is possible to make changes to and create new components of the layer – for instance, an overlay service like Paym – while still preserving the service characteristics, without it affecting all the other layers (and thus participants).

- 8.6 We are proposing the introduction of a layered architecture for payments. Each layer will provide a defined part of the value chain, based upon an agreed standard. Together these layers will deliver:
- Flexibility, to make changes and the ability to innovate quickly for customers
 - Extensibility to create new services
 - Compatibility with existing models, as existing models can be replicated
 - Improved resilience as each service is separated and single points of failure are removed. The internet itself is an example of how such a model works.
 - A future proofed and agile model which supports different approaches to change
- 8.7 Different providers could compete for the delivery of each layer, or each layer may even support multiple delivery providers.
- 8.8 The layered architecture will set out how overlay services should interact with the simplified delivery mechanism, for example through the use of standard APIs. It will also enable these overlay services to be developed either competitively or collaboratively. This layered approach reduces the systemic risk of failure in payment services, which has to be very carefully managed with the introduction of any new functionality or service updates.

Common messaging standards

- 8.9 Common messaging standards based on ISO20022 will align the UK with global standards and modernise our payments. Standardising messaging formats across PSOs will reduce complexity and provide the basis for functional enhancements and innovation.

- 8.10 Moreover, a common messaging standard will also help to enable the Simplified Payments Platform. ISO20022 can facilitate the enhanced data the Strategy envisages and will make it easier for PSPs to connect directly, simply and at low cost.
- 8.11 For consistency and to cater for all requirements the exact specification of how ISO20022 will be used needs to be specified and governed. Overlay services can then be developed using the specifications, and the messaging standard will allow the overlay service to communicate with the Simplified Delivery Mechanism outlined below.
- 8.12 Common messaging standards could be delivered without the Simplified Delivery Mechanism.

End user APIs and open access APIs

- 8.13 The SPP uses two kinds of APIs: Open Access APIs are the APIs which enable PSPs to communicate with the Simplified Delivery Mechanism and provide access into the Overlay services. The End User APIs sit above the overlay services and provide the PSP to consumer interface, for example, the experience of confirmation of payee for the end user (customer).
- 8.14 The Open Access API framework delivers more flexibility and innovation in payments messages. In particular, Open Access APIs will enable data to flow around the payments system. Additional data can be deployed by PSPs to offer services which improve security, track payments made or hand over more control to the payer. They also provide the framework for other kinds of innovation, not yet imagined.
- 8.15 The Open Access API framework does not deliver clearing messages for money transmission. The Simplified Delivery Mechanism outlined below does this role. The Open Access APIs provide instructions to the PSP on what to do with the payment in addition to the basic payment message, 'A pays B'. The Open Access API information may include the authorisation for the payment, the value, the timing and any additional data that a PSP might be required to send. For instance a message might convey the information that 'Mark should pay Martha £100, in 3 days time, at 3pm, with a reference to an invoice for a birthday cake'. The experience of this is provided to the customer by the End User API.
- 8.16 The APIs can begin to deliver benefits without the Simplified Delivery Mechanism. For instance, they could provide for Request to Pay and Confirmation of Payee functions. However, there would be significant costs associated with enabling Request to Pay on the existing systems.
- The Simplified Payments Platform requires the Simplified Delivery Mechanism to realise the full benefits of enhanced data and particularly the ability to offer payment assurance (for instance confirmation that the payment has been transacted).

API Governance

- 8.17 APIs allow two pieces of software to interact with one another, enabling different IT developers to connect their products more easily. A governance framework is needed to underpin the use of APIs, to set rules for the exchange of data and how it is used (including how End User and Open Access APIs are written), and to ensure consumers and businesses are protected.
- 8.18 There is currently a key driver for the use of APIs as part of industry work on an Open Banking standard. This stems from:
- **The Second EU Payment Services Directive (PSD2)** which gives customers new rights to use payment initiation and account information services;
 - **The Open Banking Working Group (OBWG)**, which reported to HM Treasury on the design for an Open Banking API standard for payment accounts; and
 - **The provisional remedies of the CMA Retail Banking Market Investigation**, which include recommendations for banks to introduce an Open Banking APIs standard for payment accounts, linked closely to the requirements of PSD2.
- 8.19 Our Strategy recommends that all work on APIs across payment accounts is co-ordinated. It will enable APIs to work seamlessly end-to-end across the whole payments journey. It will reduce the possibility of fragmentation or the inconsistent use of standards. The Forum is thus proposing that the Implementation Entity recommended by the CMA should, following the successful delivery of the Open Banking API, be able to expand its role to provide governance for other end-user APIs across the payments ecosystem.

Consultation Question 18

- Do you agree with the proposal for a co-ordinated approach to developing the various types of APIs? If not, please provide evidence to support your response?
- What are the benefits of taking a co-ordinated approach to developing the various types of APIs? What might be the disadvantages of taking this approach?
- How should the implementation approach be structured to optimise the outcomes?

A new architecture for payments (cont.)

A simplified delivery mechanism

- 8.20 The Simplified Delivery Mechanism underpins the Simplified Payments Platform (SPP). It makes access easier for PSPs, reduces the need for collaboration across the system and facilitates innovation and competition.
- 8.21 The Simplified Delivery Mechanism is the lowest common denominator of any payment. It simply sends a payment instruction from A to B in real-time, reliably and efficiently (the overlay service determines when a payment is sent).
- 8.22 The Simplified Delivery Mechanism is the set of rules or 'scheme' for the underlying payment message. It embodies the fundamental rules for the transfer of funds and the risk controls for the transmission of the message. It should control the safety, security and risk controls around the message. At the moment these elements are all delivered differently by various PSOs. The processing and clearing of a payment may be done through a centralised or distributed infrastructure.
- 8.23 In a centralised model, the infrastructure and connectivity between Payment Service Providers would be provided by a single central platform. The processing and clearing 'engine' would be provided by a single central infrastructure, as it is done today.
- 8.24 In the distributed model connectivity will be established between PSPs. This peer to peer connectivity could potentially provide benefits in terms of greater scalability, and resilience and potentially also increase competition in infrastructure provision by allowing individual PSPs to procure their own infrastructure. The use of Distributed Ledger Technology is not a pre-requisite of the framework, and it is recognised that more traditional technology approaches are also applicable.
- 8.25 Both models for centralised and distributed processing and clearing would require the Simplified Delivery Mechanism.
- 8.26 We have undertaken some analysis to consider these options but recognise that further work must be performed to better understand the associated advantages and disadvantages of each. There are natural tensions between resilience, control and functionality, which must be understood and managed.
- 8.27 It is likely that settlement would be provided in a broadly similar way to now as overlay services can be developed to emulate the existing system, particularly if there is a centralised system that produces a small number of net settlements. Greater consideration would need to be given to settlement for a distributed model. The specific details of settlement would need to be agreed with the Bank of England during the two-year design study. The Bank is currently undertaking a review of its RTGS settlement infrastructure, the outcomes of which are likely to be relevant to the Forum.

Consultation Question 19

- Do you agree with our proposal to create a Simplified Delivery Mechanism? If not, please provide evidence to support your response?
- Should the new consolidated entity be responsible for leading the development of the new rules/scheme or should a new body be given this responsibility?
- Could an existing scheme adapt to provide the Simplified Delivery Mechanism or should a new one be developed?
- Would it be better for the processing and clearing functions of the simplified framework to be built on distributed architecture or a centralised infrastructure? Could there be a transition from a centralised structure to a distributed structure over time?
- Do you think it is feasible to begin work to design a new payments infrastructure given existing demands on resources and funding?

Overlay services

- 8.28 All payments involve the transfer of value from the payer to the beneficiary. The exchanges between the payer and beneficiary do not technically need to be part of the actual payment. These exchanges and supporting data can be delivered through Overlay Services.
- 8.29 Overlay services allow PSPs to build their own unique propositions or to emulate existing schemes without requiring corresponding PSPs to offer the same proposition. The pre-requisite is that the overlay service supports the underlying message type (in this case, the Simplified Delivery Mechanism) and that all PSPs use this message type. This supports the development of a far more competitive and innovative market.

Pingit?

Pingit is a mobile app which provides Barclays' customers with mobile payments. However, Barclays' customers can only use Pingit to pay other Barclays' customers or people who have downloaded the Pingit app. Using the Simplified Payments Platform Pingit would be an overlay service that communicates with the Simplified Delivery Mechanism enabling the payment to be made to the beneficiary PSP without that PSP needing to have the same overlay service, in this case Pingit.



- 8.30 Using the Simplified Payments Platform, Pingit could have been an overlay service that communicates with the Simplified Delivery Mechanism enabling the payment to be made to the beneficiary PSP without that PSP needing to have the same overlay service (as is the case for Pingit). Using PSD2 requirements to allow third party access to an account, a consumer could download and use an app like Pingit without being required to change bank account or pre-load it; and their PSP would support it, without being required to have the overlay service.
- 8.31 Existing payment products, including Bacs Direct Debit could be developed into overlay services. As a result, it is envisaged that the existing users of Bacs Direct Debit would be able to continue largely unaffected. This includes the 20,000+ Direct Corporate Access users who use applications provided by their solution providers or Payment Service Provider.
- 8.32 We anticipate that in the longer run all current UK domestic retail payment types would migrate to overlay services and use the Simplified Delivery Mechanism as their single set of rules.

Compatibility and transition

- 8.33 If delivered, over a period of time, the Simplified Payments Platform will become the standard. It is therefore vital that it is compatible with existing services during the period of transition. In Appendix 3 we set out the principles that would ensure a smooth transition and the continued delivery of the existing payment services customers enjoy today.

Next steps

- 8.34 The SPP is a long term concept, which requires further design and definition.
- 8.35 After the design is complete we are proposing an initial phase to validate the standards and to adapt them as the system is created. The design phase will incorporate an initial testing phase.
- 8.36 It is proposed that the design is developed further over a two-year time period from the publication of our final Strategy. This will assess the solution, develop a detailed design, establish detailed requirements, develop prototypes and begin testing.
- 8.37 This review period will need to incorporate a series of milestones and checkpoints to enable the industry to confirm progress and agree next steps. It will also need to take into account all of the proposed solutions to establish which could be, more effectively delivered through the SPP rather than through tactical and incremental change, which is superseded.
- 8.38 Other key areas which require further consideration include:
- The outcomes of the Bank of England's review into the Real-Time Gross Settlement (RTGS) standards and processes.
 - Regulatory changes either in the pipeline or developed in future.
 - International payment messaging standards being further enhanced or repealed.
 - Widespread adoption of Blockchain technologies and the associated impact on centrally, and globally, regulated banking systems.

Consultation Question 20

- Do you agree that the existing arrangement of the payments system in the UK needs to change to support more competition and agility?
- Will the package of proposals we suggest, the Simplified Payments Platform, deliver the benefits we have outlined? What alternatives could there be?

A new architecture for payments (cont.)

Costs and benefits

The implementation of an SPP solution, whether centralised or decentralised, will incur a range of different types of costs and is seen to have a range of benefits for the UK payments system. These are outlined in the table below.

Identified Benefits	<p>End Users</p> <ul style="list-style-type: none"> The SPP will be able to respond more quickly, efficiently and more frequently to the needs of consumers, businesses and government. Overlay services would then provide the services that end users would currently like, including: <ul style="list-style-type: none"> Request to pay Confirmation of payee Payments assurance data Enhanced data Without the implementation of SPP, it would be very difficult to change the existing systems to deliver these solutions and any others identified in the future
	<p>Payment Service Providers</p> <ul style="list-style-type: none"> The SPP will open up payments and improve direct access, creating a level playing field for PSPs This more accessible payments system will enable innovation to flourish through competitive differentiators, in particular around customer experience It is also envisaged that long-term efficiencies can be realised. These could be delivered across a range of areas including resilience of infrastructure, transparency of funds, enhanced operational and potentially settlement controls
	<p>Industry benefits</p> <ul style="list-style-type: none"> The SPP will provide the scalability in volume of payments and users that is anticipated It should align with international standards enabling international interoperability and potentially competition within infrastructure providers The approach should also improve security and resilience in the system. Enabling an enhanced end-to-end management of risk The flexible design of the SPP will also reduce the likelihood that future industry wide remediation activity, similar to that undertaken by the Forum will be required

Identified types of costs

One-off – Time and resource

- The collaborative time and resource from the industry to support the commissioning and development of the solutions and agreement of governance and standards
- The time, cost and resource from PSPs to support the implementation of these solutions within their business processes and systems
- The time, cost and resource from Business End users to support the implementation of these solutions within their business processes and systems and from Consumer End Users to adapt to and understand how to use the new solutions
- The regulator and government time and resource required to implement the solutions

One-off – Technology and Other investment

- Investment in a centralised data sharing and data analytics capability, these costs will both be incurred collaboratively and at a PSP level
- Investment in a central KYC utility for storing and sharing KYC data, costs will both be incurred collaboratively and at a PSP level

Ongoing costs

- Regulator/Government costs of supervising the PSPs implementation of the 'technical standard'
- Collaborative ongoing costs to support: the cost of maintaining the 'technical standard'; operating and maintaining the central data sharing and data analytics solution; and operating and maintaining the central KYC utility
- PSP ongoing operating costs to support:
 - The cost to PSPs of providing data for the central data sharing and data analytics solution.
 - The cost to PSPs of digesting and analysing data from the central data sharing and data analytics solution
 - The cost to PSPs of digesting and analysing data from the central KYC utility

Our strategy in sequence

Evolution not revolution

- 9.1 The solutions proposed by the Forum are evolutionary in nature and some are extensions of current industry processes and developments. The solutions are intended to provide innovative answers to the defined problems. They should allow the UK payments industry to more quickly respond more quickly to future technological developments, regulations and changing customer profiles.
- 9.2 Some of the solutions may be ambitious in scope but they should not require a full-scale revolution of the payment industry in the short term.

Solution sequencing

- 9.3 The solutions proposed can collectively be considered complementary parts of a longer term, strategic aim of modernising the UK payments industry, ensuring it is future-proof and ready to adapt to the changing needs of end users. It is noted that the industry is already undertaking a significant amount of change as described in Chapter 3, typically as a result of regulation and technological advances.
- 9.4 In order to attain the Forum's vision of the future, the solutions need to be sequenced in respect of their interdependences and their envisaged workload in the context of the current changing payments landscape. The solutions have been categorised into four groups, according to how soon their implementation can begin and the scale of undertaking.

1) Short-term proposal (12 months)

- 9.5 These solutions offer short term improvement. These improvements could be delivered over a relatively small period of time and may be performed in isolation or already be being undertaken in some form.

2) Mid-term proposal (1-3 years)

- 9.6 These solutions will enable further change in the industry. They require careful planning and governance but will provide a platform for future, effective change and are likely to be completed over a 1 to 3 year period.

3) Strategic Change (3+years)

- 9.7 These solutions can achieve the visionary aims of the Forum and will likely be delivered over a longer time horizon.

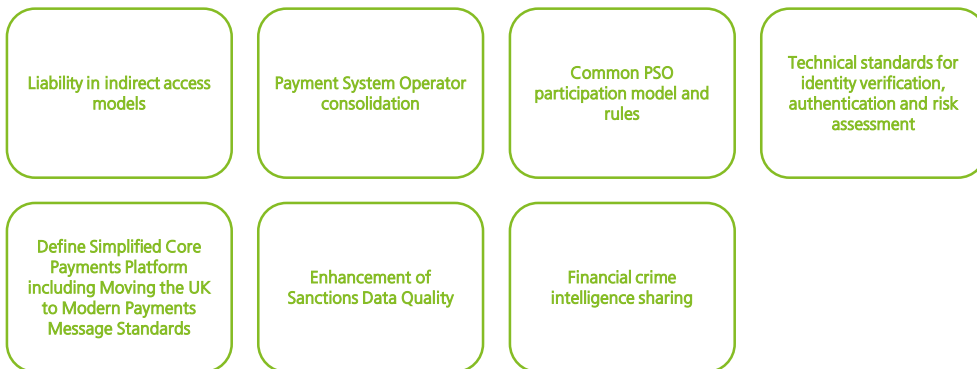
4) No longer considered

- 9.8 Solutions that the forum does not believe should be progressed further at this stage.

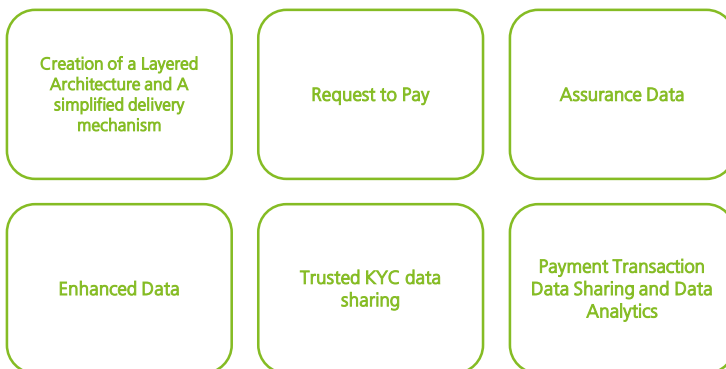
1) Short-term proposal (12 months)



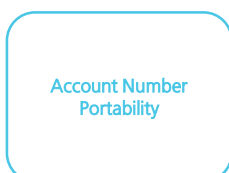
2) Mid-term proposals (1-3 years)



3) Strategic Change (3+ years)



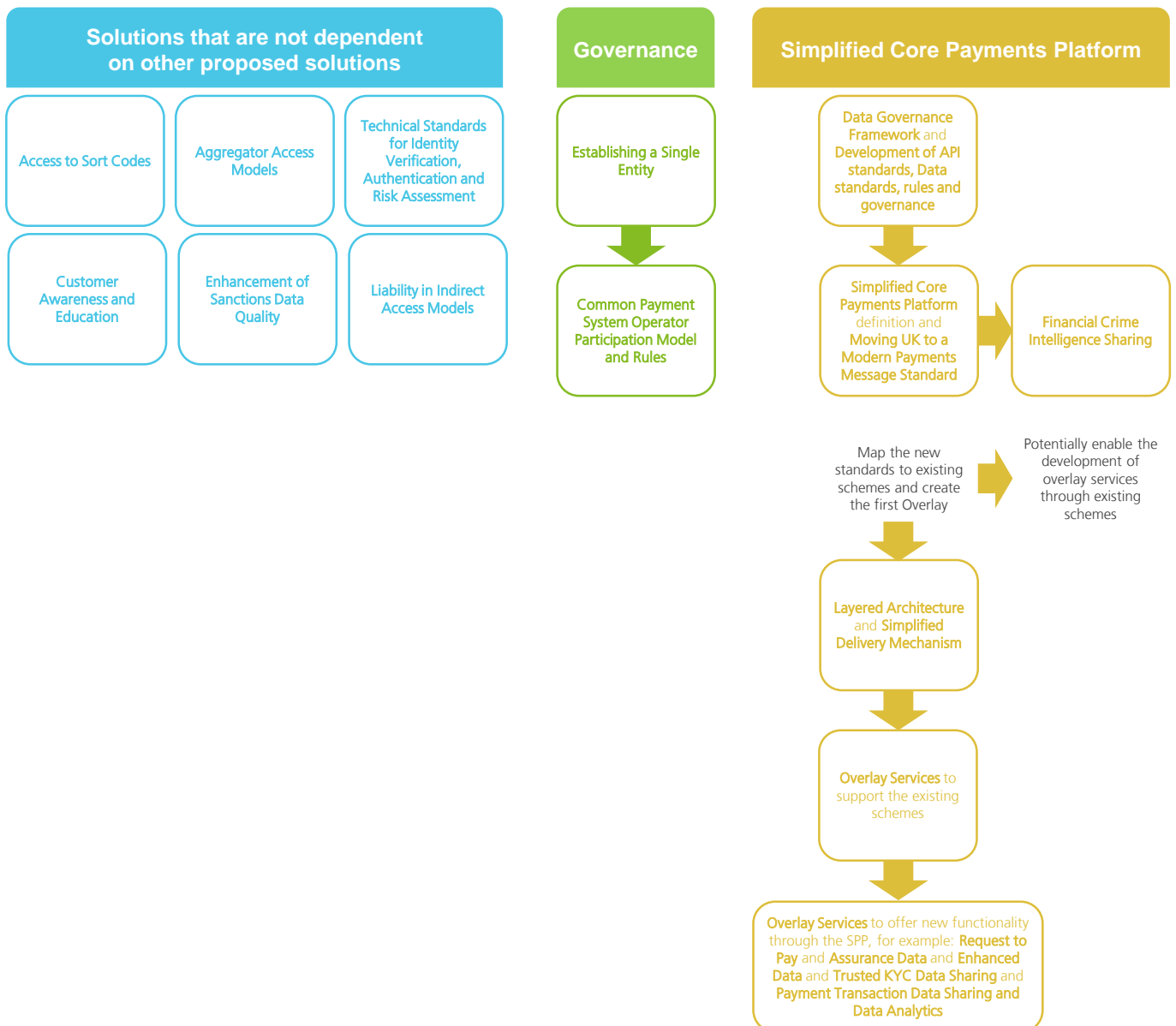
4) No longer considered



Our strategy in sequence (cont.)

Initial sequencing

- 9.9 The Forum has considered the proposed solutions and a potential logical sequencing of these based upon dependencies. The principles behind this initial approach has been to consider how the overall aims of the Forum can be achieved, and the benefits this will deliver, in the earliest quickest time possible but by only making changes once. For example, we propose developing Request to Pay as an overlay service on the SPP, rather than on the existing infrastructure and then again once SPP has been delivered. While this approach may reduce the amount of overall change needed, it is likely that a number of the benefits, in particular for end users, would not be delivered for a number of years.
- 9.10 Alternatively, the approach could be to deliver many of the proposed changes on the existing infrastructure, potentially by extending the existing services delivered. There may also be other approaches which are better at achieving the benefits. However, developing the existing infrastructure is unlikely to resolve all of the detriments identified, in particular promoting innovation or downstream competition, which further benefits the users.



Sequencing next steps

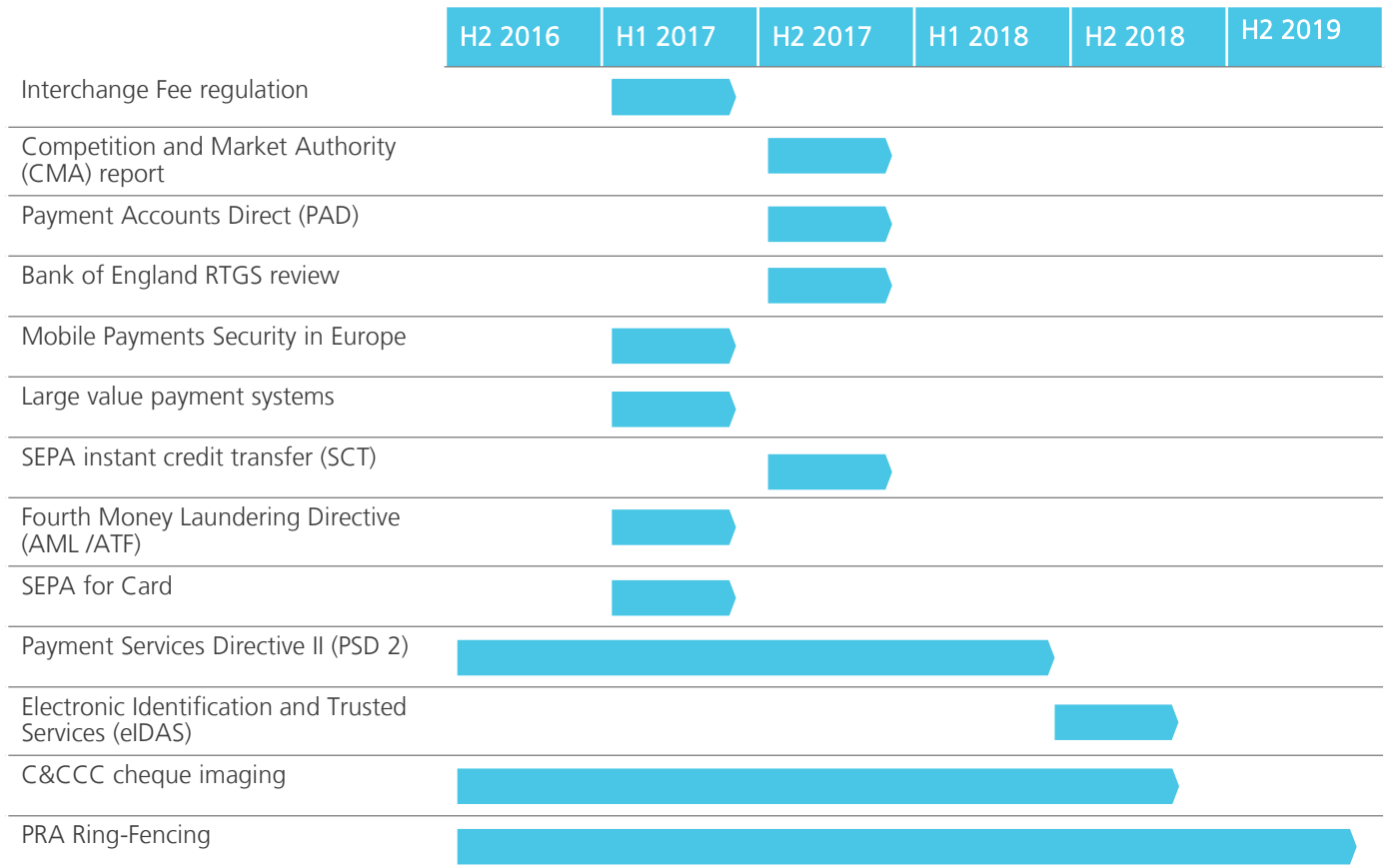
- 9.11 The Cost Benefit analysis once completed will inform the proposed sequencing of the solutions. This will enable the Forum to unbundle the benefits outlined and the resources required to achieve these. The further analysis, over the summer, will consider the capacity for change.
- 9.12 A joined up approach to implementation will be needed. Regulators and industry will have to work together to agree the priorities and timing for delivery. We recognise it is understood though at this juncture the solutions are at a conceptual stage of thinking. Once the design approach is better understood it will further inform the potential sequencing and enable the interlock between each to be determined. For a number of the solutions, in particular for the SPP, this will only be possible once a pilot stage has been carried out.

Market consideration

- 9.13 Across the industry significant change is already underway as a result of regulatory enforced change. It is likely that expert resource in particular from PSPs, required to deliver the solutions proposed by the Forum, will be utilised delivering these mandatory changes. As part of the further analysis of the sequencing the impact of these market considerations will be taken into account. These market considerations include:

Consultation Question 21

- Do you agree with this proposed sequence of solutions and approach outlined to further clarify this?
- If not, what approach would you take to sequencing to bring forward the anticipated benefits, in particular for end users?



Implementation approach

- 10.1 As articulated in the sequencing chapter our proposed Strategy envisages solutions that can be delivered over the short, medium and long term solutions. We anticipate that different groups of solutions are likely to require different implementation approaches, led by a number of organisations and with varying levels of industry involvement and regulatory oversight.
- 10.2 For the Common Participation Model and Rules, and Enabling Aggregator Solutions, there is work required in the short term which is likely to be coordinated by the Interbank System Operators' Coordination Committee (ISOCC), and which is monitored by the PSR.
- 10.3 On PSO Governance reform, the PSR and the Bank of England will be considering the best approach to implement this to achieve the intended outcomes. This will be done over the coming months, and the outputs are expected to feed into our final Strategy which will be published in autumn 2016.
- 10.4 The Simplified Payments Platform (SPP) is at a conceptual stage in development. Further work is needed on the detailed design of this, before developing the detailed cost benefit analysis and detailed implementation plan. Detailed work is also needed to develop the Application Programming Interfaces (APIs) which will be a part of the SPP. Our Strategy recommends that all work on APIs in payments is co-ordinated.
- 10.5 Once the SPP detailed design and analysis has been completed, a delivery mechanism will need to be established in order to develop the technical standards, rules, and prototypes that will underpin the SPP (including the Moving to Modern ISO20022 Messaging Standards solution).
- 10.6 Finally, solutions around tackling financial crime will be ongoing in parallel with the above. Each solution is likely to involve a different mix of regulators, public bodies, and other stakeholders (including industry), each with differing levels of involvement in accordance with their core role.
- 10.7 All of the above, including the process of delivery and implementation, will need to be closely monitored to ensure sufficient progress.
- 10.8 During the consultation process, the PSR together with the Forum will carefully consider potential implementation options. The outcome of our deliberations will form part of the final Strategy document

Consultation Question 22

- What approach should be taken to deliver the implementation of the Forum's Strategy?
- Who should oversee the implementation of the Forum's Strategy?
- What economic model(s) would ensure delivery of the Strategy recommendations?

Cost benefit analysis approach

11.1 Further analysis is required to better understand the true scale of the benefits and the associated cost of development. During the consultation period the Forum will carry out further Cost Benefit Analysis for each of the proposed solutions. In particular, this analysis will examine a scenario (the “counterfactual”) in which the existing systems are changed or upgraded to meet the user needs identified in this draft Strategy. It will then estimate for both the solutions proposed in the Strategy and the counterfactual scenario the high level cost and benefits. This will enable the Forum to better understand when benefits can be obtained and refine its initial views on sequencing. It will also provide clarity on where investment will be required and help to shape views on how this could be funded.

Costs

- 11.2 The Forum will estimate the direct and indirect costs which are associated with each solution. This will be established through workshops and desk based research. It will cover:
- One off additional investment costs for both any central, collaborative changes and those likely to be incurred by relevant industry participants. Typically it is expected that these costs will be for technology and development resource.
 - Additional reoccurring costs which are likely to be incurred and an indication of where they might fall. Typically, it is expected that these costs will include maintaining and operating the services which have been developed.
 - The time that is likely to be required to develop each solution and the counterfactual scenarios.
- 11.3 This cost analysis will in general provide an indicative view on the magnitude of these costs rather than precise estimates. It will only be possible to produce costs, with a good degree of certainty, once the detail design of the solutions has been completed.

Benefits

11.4 At the start of the process the Forum undertook a mapping exercise of the needs of payment systems user. The Working Groups established by the Forum then developed solutions to address the end user needs. The qualitative analysis, undertaken by the Forum Working Groups, of the solutions highlighted potential benefits for each

and how well each detriment is resolved has been undertaken. Further analysis will need to be undertaken to quantify the range of identified benefits. This will be split between those benefits which are direct and those which are indirect.

- 11.5 This work will also consider the following:
- Whether the full range of benefits of the solution were captured in the high level analysis.
 - If it is possible to quantify some of these benefits. For instance, can the cost savings that come about from the reduced costs of access be estimated?
 - Whether the benefits are in addition to those that would be achieved under alternative scenarios.
 - Timing of when the benefits will likely be realised.
 - Estimation of indirect or secondary benefits should be considered. These are by-products, multipliers, spill overs or investment effects of the solution which are not closely related to the primary objective. For example enhanced competition and greater innovation may have a range of positive impacts on end users.
 - Unvalued benefits can be included utilising similar methods to estimate them as those outlined above for costs.
- 11.6 It will be possible to further quantify the potential benefits for a number of solutions; however, for some solutions this will be extremely difficult to achieve as the concepts need to be revised and defined. Where this is not possible an indication of the likely scale will be considered. The reasons why further analysis cannot be undertaken, at this stage, will also be documented.

Consultation Question 23

- Do you agree with the proposed approach for quantifying the potential costs and benefits of the proposed solutions?
- Do you agree with the costs and benefits drivers outlined in this document?
- We would appreciate any information on the potential costs and benefits you may have to assist our analysis.



Conclusion



It is now over to you. We want to hear your views on the short, medium and long term solutions that we have proposed, and help us shape the final Strategy to be published in the autumn.

Ruth Evans

- 12.1 This draft strategy is the product of a significant amount work of not just the 22 Members but also the 190 members of our Working Groups, plus the valued input of the 500 people on our Payments Community.
- 12.2 This is just an interim step and we are now keen to understand your views as we develop our final strategy.
- 12.3 The consultation period is open from 13th July to 14th September. Please send your responses to forum@psr.org.uk. A template to help you structure your response can be found here <https://www.paymentsforum.uk/forum-strategy-consultation-questions-response-template>

Glossary

Term or acronym	Description
Access Requirements	The rules (including criteria), terms or conditions (including fees and charges), policies or procedures governing access to or participation in a regulated payment system.
Access Rule	The Access Rule proposed by the PSR requires pan-GB Operators not subject to the PSRs 2009 to have objective, risk-based, and publicly disclosed access requirements, which permit fair and open access. The Access Rule is part of the Access Package of proposals.
Accreditation	The process that ensures that a person or solution is compliant with the set of criteria predefined by the Operator. Being an accredited provider or software solution means that the provider or solution has gone through a process set by the Operator and has been considered by the Operator to meet the required technical and other standards that make up the accreditation requirements.
Affiliate or Associate member (of a card system)	An Indirect PSP in card payment systems; known as Affiliate for MasterCard, and Associate for Visa. An Affiliate/Associate is a participant in a card system that must be sponsored by a Principal member (or Direct PSP) for access. It can carry out any or all of the functions of the Principal, if the Principal agrees to be responsible for their actions, except the activity of sponsoring other Affiliates/Associates.
Affiliates (in an interbank system)	Service-users and other interested parties who are members of the Electronic Payments Affiliates Group (for Bacs and FPS) or the CHAPS Affiliates Group.
Agency Agreement	See Sponsor Agreement.
Agency Bank	For the purposes of this Consultation Paper, this refers to a credit institution that is an Indirect PSP.
AML (Anti-Money Laundering)	The package of initiatives and regulations directed at preventing money laundering, including the Money Laundering Regulations 2007.
ANP (Account Number Portability)	The concept of allowing an end-user to change their banking service provider with minimum effort and without changing their bank account number.
API	
ATM (Automated Teller Machine)	A device that allows authorised users, typically using machine-readable plastic cards, to withdraw cash from their accounts and/or access other services.
ATM deployer	A company which owns and operates ATMs.
Authentication (in the context of payment processing)	A security mechanism for verifying the identity and/or authority of a person or entity in relation to a potential transfer of funds.
Authorisation (in the context of payment processing)	Consent given by a person or entity to a PSP (or to a third-party acting on behalf of that PSP) in order to allow the transfer of funds.
Bacs	The payment system which processes payments through two principal electronic payment schemes: Direct Debit and Bacs Direct Credit. The payment system is operated by BPSL.
The Bank	The Bank of England.

Glossary (cont.)

Term or acronym	Description
Banks	For the purposes of this Consultation Paper, the term 'banks' refers more generally to both banks and building societies and other Payment Service Providers.
BBA	The British Bankers' Association.
BCCCL	Belfast Bankers' Clearing Company Ltd - the Operator of the NICC payment system.
BPSL	Bacs Payment Schemes Ltd - the Operator of the Bacs payment system.
C&CC or C&CCCL(Cheque & Credit Clearing)	The payment system in England, Scotland and Wales that processes cheques and other paper instruments. It is operated by Cheque and Credit Clearing Company Ltd.
CA98	Competition Act 1998.
Card (payment card)	A device or personalised set of procedures agreed between the service-user and the PSP that can be used by its holder to pay for goods and services or to withdraw money.
Card acquirer (or acquirer)	A PSP that processes card payments on behalf of a merchant. In point-of-sale transactions, the acquirer is the entity to which the merchant transmits the necessary information in order to process the card payment.
Card issuer (or issuer)	A PSP that makes payment cards available to cardholders, authorises cards and card-initiated transactions (i.e. at point-of-sale, online or at ATMs), and guarantees payment to the acquirer for transactions that conform to the rules of the relevant system.
Card Operator	An Operator of a card payment system.
Card payment system (or card system)	A payment system supporting payments made by cards. Examples of card payment systems that we expect to be designated by the Treasury are Visa and MasterCard.
CASS (Current Account Switch Service)	A service that makes it easier for customers to switch their current account.
Central Infrastructure	A package of systems and services provided under contract to an Operator for the purpose of operating the relevant payment system, and specifically the processing of payment transactions and funds transfers. The package must include at a minimum the provision of hardware and software (including related ancillary support services). It may include additional services such as secure telecommunications networks, facilities, physical security or support staff. Central infrastructure may be provided to the Operator by an external provider, or internally.
Central Infrastructure Provider	An Infrastructure Provider who provides Central Infrastructure to an Operator under a contract.
CHAPS	The UK's real-time, high-value sterling payment system, where payments are settled over the Bank's RTGS infrastructure. It is operated by CHAPS Clearing Company Ltd (CHAPS Co).

Glossary (cont.)

Term or acronym	Description
Clearing	The process of transmitting, reconciling and, in some cases, confirming transfer orders prior to settlement, potentially including the netting of orders and the establishment of final positions for settlement.
CMA	Competition and Markets Authority.
Code of Conduct	For the purposes of this Consultation Paper, this refers to the PSR-approved 'Code of Conduct' referred to in our proposals for Indirect Access in Supporting Paper 4: Access to payment systems in this Consultation Paper.
Constitution	Memorandum and/or Articles of Association or equivalent constitutional document of a company, organisation or association.
CPMI	Committee on Payments and Market Infrastructure (CPMI). Formerly the Committee on Payment and Settlement Systems (CPSS), which changed its name in September 2014.
CPMI-IOSCO Principles	Principles for Financial Market Infrastructures originally published by CPSS-IOSCO in April 2012. Adopted as principles by the Bank under section 188 of the Banking Act 2009 for payment systems recognised by the Bank (i.e. Bacs, CHAPS and FPS).
Current Account Switch Service	See CASS.
Designated Representative Body	A body which has been designated by the Treasury for the purposes of s.68 FSBRA as a body that may make a complaint to the PSR that a feature, or combination of features, of a market in the UK for services provided by payment systems is, or appears to be, significantly damaging the interests of service-users.
De-tiering (and tiering)	A tiering arrangement refers to the arrangement whereby a PSP can choose to rely on the services of a Direct PSP to access a payment system indirectly, such as a Sponsor Agreement (this is only possible in payment systems that allow Indirect Access). De-tiering refers to a reduction in tiered arrangements in a payment system.
Detriment	An issue with the payments landscape identified by the Forum.
Direct Access	As under s.42 (6) FSBRA, a PSP has Direct Access to a payment system if the PSP is able to provide services for the purposes of enabling the transfer of funds using the payment system as a result of arrangements made between the PSP and the Operator. For the purposes of this Consultation Paper, the 'arrangements' refer to the following: In the case of Bacs, CHAPS, C&CC, FPS and Visa, the arrangements are made between the PSP, the other existing Direct PSPs and the Operator. In the case of MasterCard, the arrangements are made between the PSP and the Operator. For the purposes of this Consultation Paper, in the cases of LINK and NICC we also consider that Direct Access is the result of the following arrangements: In the case of LINK (and because of LINK's particular organisation model), the arrangements are made between the PSP, the other existing Direct PSPs and the Infrastructure Provider to the LINK payment system (VocaLink). In the case of NICC, the arrangements are made between the PSP and the other existing Direct PSPs.

Glossary (cont.)

Term or acronym	Description
Direct Agency Access	This describes the specific situation where an Indirect PSP has Direct Technical Access arrangements for FPS, by securing Direct Technical Access through a third-party provider, without becoming a Direct PSP of FPS. In this scenario the Indirect PSP uses a Sponsor Bank for the provision of settlement services.
Direct Credit	The Bacs scheme by which a person or entity can transfer funds electronically, directly into a specified bank account (e.g. paying salaries).
Direct Debit	The Bacs scheme for collecting preauthorised debits on the payer's bank account, which are initiated by the payee.
Direct PSP	A PSP that has Direct Access.
Direct Technical Access	The manner in which a PSP technically connects directly with either a payment system Infrastructure Provider or an Operator in order to enable the transfer of funds. For the purposes of this Consultation Paper, Direct Technical Access does not include the settlement of funds.
EA02	Enterprise Act 2002.
EMI (Electronic Money Institution)	A person that has been granted authorisation under a national legislation implementing title II of the Electronic Money Directive (2009/11/EC) including, for the avoidance of doubt, a person who has been granted a waiver from full authorisation and been registered in accordance with Article 9 Electronic Money Directive (a 'small EMI').
End-user	A person who is a payee or payer.
FCA	Financial Conduct Authority.
FI	Financial institution.
FMIRs	The Financial Markets and Insolvency (Settlement Finality) Regulations 1999 (SI 1999/2979) which contains the UK transposition of the European Settlement Finality Directive (Directive 98/26/EC) (SFD).
Four-party card system	A card system where the stakeholders involved are: 1) the issuer; 2) the acquirer; 3) the cardholder; and 4) the merchant. Examples of a four-party system are MasterCard and Visa.
FPS (Faster Payments Service)	The payment system that provides near real-time payments as well as Standing Orders. It is operated by FPSL.
FPSL	Faster Payments Scheme Ltd - the Operator of the FPS payment system.
FSBRA	Financial Services (Banking Reform) Act 2013.
HMRC	Her Majesty's Revenue & Customs.
IBAN (International Bank Account Number)	An International Organization for Standardization code that uniquely identifies an individual account at a specific financial institution in a particular country.

Glossary (cont.)

Term or acronym	Description
IAP (Indirect Access Provider)	A PSP that provides indirect access to a payment system to other PSPs for the purpose of enabling the transfer of funds within the United Kingdom. This is the case whether the IAP does or does not provide the indirect PSP with a unique sort code (i.e. whether or not the indirect PSP is listed as the “owning bank” for a sort code in the Industry Sort Code Directory, with the sponsor bank listed as the “settlement bank”).
IFR (Interchange Fee Regulation)	The draft Regulation of the European Parliament and of the Council on interchange fees for card-based payment transactions.
Indirect Access	For the purposes of this Consultation Paper, a PSP has Indirect Access to a payment system if it has a contractual arrangement with a Direct PSP to enable it to provide services (for the purposes of enabling the transfer of funds using that payment system) to persons who are not participants in the system.
Indirect PSP	A PSP that has Indirect Access.
Information Hub	For the purposes of this Consultation Paper, this refers to the Information Hub being developed by industry and referred to in our proposals for Indirect Access in <i>Supporting Paper 4: Access to payment systems</i> in this Consultation Paper.
Infrastructure Provider	As under s.42 (4) FSBRA, any person who provides or controls any part of the infrastructure used for the purposes of operating a payment system.
Interbank Operator	An Operator of an interbank payment system.
Interbank payment system (or interbank system)	The Bacs, C&CC, CHAPS, FPS, LINK and NICC payment systems (i.e. it does not include card payment systems).
Interchange fees	The term used in the payment card industry to describe a fee usually paid between PSPs for the acceptance of card-based transactions. They can be bilateral or multilateral. For example, for credit or debit card transactions, the interchange is a fee paid to the cardholder's PSP (the 'card-issuing PSP') by a merchant's PSP (the 'acquiring PSP') for each transaction made.
IOSCO	International Organization of Securities Commissions.
ISO20022	An international financial messaging standard that is being introduced into a number of payment systems.
KYC (Know Your Customer)	Or Know Your Business, as appropriate. This refers to the due-diligence that financial institutions must perform in order to identify their customer and ascertain relevant information from them to perform business with them (and comply with the relevant legislation). KYC controls are designed to prevent identity fraud, money laundering, terrorist financing and to ensure compliance with international trade sanctions.
LINK	The payment system which enables end-users to take cash out of their accounts (amongst other activities) using the network of ATMs in the UK. It is operated by LINK Scheme.
LSL	Link Scheme Limited - the Operator of the LINK payment system. The LINK Scheme does not itself install or operate cash machines.

Glossary (cont.)

Term or acronym	Description
Merchant	In a payment system context, a merchant is the retailer or service provider that accepts electronic payments (including card payments) from end-users, through the services of an acquirer.
MIFs (Multilateral Interchange Fees)	Multilaterally-agreed interchange fees payable between the PSPs of the payer and payee.
Mobile payment service	A payment service made available through a mobile device.
MSC (Merchant Service Charge)	A fee that merchants pay to their acquirer, in return for a range of services (including payment guarantee, connectivity to the card system network, terminal hardware and software, customer support).
NDA (Non-Disclosure Agreement)	A contract by which one party agrees not to disclose confidential information that it has received from another party.
NICC (Northern Ireland Cheque Clearing)	The payment system in Northern Ireland that processes cheques and other paper instruments. It is operated by BBCCL.
PSR objectives	The PSR's statutory objectives as set out in s.50-52 FSBRA - these are the competition objective, the innovation objective and the service-user objective.
Operator (Payment System Operator)	As under s.42 (3) FSBRA, in relation to a payment system, Operator means any person with responsibility under the system for managing or operating it; and any reference to the operation of a payment system includes a reference to its management.
Pan-GB Operators	A sub-category of Operators which have activities across a substantial part of Great Britain.
Participants in payment systems	As under s.42 (2) FSBRA, includes Operators, PSPs and Infrastructure Providers.
Paym	A service that enables person-to-person payments to be made using mobile phone numbers as a proxy, e.g. for sort code and account number.
PI (Payment Institution)	A person that has been granted authorisation under a national legislation implementing the PSD or been granted a waiver from full authorisation and been registered in accordance with Article 26 PSD (a 'small PI').
Payment processing	The performance of the actions required, in accordance with the rules of a payment system, for the handling of a transfer of funds from the point of acceptance by the system to the point of discharge from the system. Processing may include initiation, clearing, sorting, netting, and/or matching.
Payment routing information	A combination of letters, numbers or symbols specified by an entity to be provided when instructing or requesting a payment for the purpose of routing the payment to the correct destination.

Glossary (cont.)

Term or acronym	Description
Payment system	As under s.41 FSBRA, a payment system is a system which is operated by one or more persons in the course of business for the purpose of enabling persons to make transfers of funds, and includes a system which is designed to facilitate the transfer of funds using another payment system. Limited exclusions are set out in s.41 (2) and (3) FSBRA. Only payment systems which are designated by the Treasury are 'regulated payment systems'.
Payment systems infrastructure	<p>Payment systems infrastructure is the hardware, software, connections and operating environments that support the clearing and/or settlement of a payment or funds transfer request after it has been initiated.</p> <p>For the purposes of this Consultation Paper 'payment systems infrastructure' refers collectively (and individually) to:</p> <ul style="list-style-type: none"> • Central Infrastructure and other infrastructure within Operators or provided to Operators. • Payments-related infrastructure within PSPs or provided to PSPs. • Payments-related infrastructure provided to service-users. • For the purpose of enabling the transfer of funds using a payment system.
Payments Council or Payments UK	An industry membership organisation set up following the OFT's Payment System Task Force, which includes a focus on payment systems.
PRA	Prudential Regulation Authority.
Principal	A Direct PSP in a card payment system. Principals can issue cards, service merchants and sponsor other financial institutions for membership of a card system.
Principles (PSR Principles)	High level legally binding rules proposed by the PSR which set out the expected behaviour of industry participants (similar to the FCA's PRIN Sourcebook). See Supporting Paper 6: Regulatory tools.
PSD (Payment Services Directive)	The European Payment Services Directive (2007/64/EC) which has been implemented into UK law by the PSRs 2009. The PSD provides the legal foundation for the creation of an EU-wide single payments market.
PSD2	A proposed revision of the PSD.
PSP (Payment Service Provider)	As under s.42 (5) FSBRA, a PSP, in relation to a payment system, means any person who provides services to persons who are not participants in the system for the purposes of enabling the transfer of funds using the payment system. For the purposes of this Consultation Paper, this includes Direct PSPs and Indirect PSPs.
PSR	Payment Systems Regulator.
PSRs 2009	Payment Services Regulations 2009 (SI 2009/209) - these are the UK regulations which implement the PSD.

Glossary (cont.)

Term or acronym	Description
Regulated payment system	A payment system designated by the Treasury under s.43 FSBRA. The payment systems that the Treasury has proposed designating in its consultation 'Designation of Payment Systems for Regulation by the Payment Systems Regulator' (14 October 2014) are: Bacs, C&CC, CHAPS, FPS, LINK, NICC, MasterCard, and Visa.
Reporting Rule	The Reporting Rule proposed by the PSR requires all regulated Operators subject to an access obligation (either our proposed Access Rule or Regulation 97 of the PSRs 2009, as applicable) to keep under review their Access Requirements, provide annual compliance reports to the PSR, keep the PSR informed of any material updates and changes which are made to their Access Requirements and publish their Access Requirements on their website. The Reporting Rule is part of the Access Package of proposals.
RTGS (Real Time Gross Settlement)	The continuous (real-time) settlement of funds transfers individually on an order-by-order basis. Each individual payment is settled in real time across the settlement accounts of Direct PSPs.
RTGS Infrastructure (of the Bank of England)	The Bank of England's infrastructure for continuous (real-time) settlement of funds transfers.
SEPA (Single Euro Payments Area)	The SEPA Regulation (EC 260/2012). The Regulation aims to create a European Single Market for retail payments. Effective from 1 August 2014, in euro area countries and by 31 October 2016 in non-euro area countries.
Service bureau	Provides an outsourced service for the submission and processing of payments on behalf of service-users. Service bureaux may also provide a range of value-added services (such as payroll processing).
Service-user	As under s.68 (1) FSBRA, service-user means those who use, or are likely to use, services provided by payment systems.
Settlement	The discharge of obligations in respect of funds owing between two or more participants in a payment system.
Settlement account	An account which is used to settle transactions between participants in some payment systems.
SFD (Settlement Finality Directive)	The EU Directive on Settlement Finality in Payment and Securities Settlement Systems (Directive 98/26/EC), implemented into UK law by the FMIRs. The Bank of England is the UK designating authority for the purposes of the SFD.
Sort code	A six digit number used for the purpose of routing payments in certain payment systems.
Sponsor Agreement	An agreement in which an Indirect Payment Service Provider obtains access to one or more payment systems through a Sponsor Bank. Also referred to as an Agency Agreement.
Sponsor Bank	A Direct Payment Service Provider that provides other Payment Service Providers with Indirect Access for the purpose of enabling the transfer of funds within the UK.

Glossary (cont.)

Term or acronym	Description
Standing Order	An instruction from a payer to their Payment Service Provider to pay a set amount at regular intervals to the payee's account type.
Technical Access	The manner in which a Payment Service Provider technically connects with either a payment system Infrastructure Provider, an Operator, a Sponsor Bank or a third-party service provider in order to enable the transfer of funds. For the purposes of this Consultation Paper, Technical Access does not include the settlement of funds.
TFEU (Treaty on the Functioning of the European Union)	The Consolidated Version of the Treaty on the Functioning of the European Union (2012 OJ C326/47).
Third-party service provider	A third-party service provider who provides services to facilitate the processing, acceptance, management and/or transmission of payments. Examples include technology providers, telecommunication providers, payment gateways/platforms, point of sale terminal providers, and fraud management services.
Three-party card system	A card system involving the following stakeholders: 1) the card system itself, which acts as issuer and acquirer; 2) the cardholder; and 3) the merchant. An example of a three-party system is American Express.
Treasury	Her Majesty's Treasury.
TSC	Treasury Select Committee.



Appendix 1 – The Forum

The Forum consists of one chair, independent from industry and 22 industry members. The Forum's membership includes user representatives and payment service providers. Members were appointed jointly by the PSR and the Forum chair following a public nomination process during the summer of 2015.

The Bank of England (BoE), the Prudential Regulatory Authority (PRA), the Financial Conduct Authority (FCA) and the PSR are observers on the Forum. The PSR also provides the secretariat to the Forum.

The Forum Members are:

Ruth Evans	Chairperson	
Adam Marshall	Executive Director, Policy and External Affairs	British Chambers of Commerce
Alan Smith	Head of Payments and Banking Services	Post Office
Becky Clements	Head of Industry Engagement and Payment Change	Metro Bank
Carl Pheasey	Head of Policy	Money Advice Service
Carlos Sanchez	CEO	Orwell Group
Faith Reynolds	Member	Financial Services Consumer Panel
John Hackett	Chief Operating Officer	HSBC
Katherine Horrell	Group Treasurer	Centrica
Lisa Felton	Head of Consumer Policy	Vodafone
Marion King	Group Director of Payments	Royal Bank of Scotland
Mark Lyonette	Chief Executive	ABCUL
Michael Maier	Chief Operating Officer	Fidor Bank
Mike Smith	Commercial Director	Raphaels Bank
Neil Lover	Head of Payments & Financial Crime and MRLO	Coventry Building Society
Nick Davies	Richer Data Strategy Lead	Department of Work and Pensions
Otto Benz	Director, Strategic Payments	Virgin Money
Philip McHugh	Chief Executive, Business Solutions	Barclaycard
Russell Saunders	Managing Director - Global Payments	Lloyds Banking Group
Ruth Milligan	(Until February 2016) Head of Payments and Retail Finance	British Retail Consortium
Ruth Wandhöfer	Global Head for Regulatory and Market Strategy	Citi Bank
Sian Williams	Head of National Services	Toynbee Hall
Thaer Sabri	Chief Executive	Electronic Money Association
Tom Ironside	Head of Business and Regulation	British Retail Consortium

Appendix 2 – Detriments

Following is the final, refined long-list of detriments, grouped per similarities and overarching themes, together with consecutive weighted scores that were agreed by the Forum membership.

Detriment Group	#	Detriment	Score
Customer Control	1	Payers and payees need more flexible mechanisms for collecting and making recurrent and ad hoc payments.	88
	2	Payers and payees need more mechanisms for payments that give greater control to the payer and more certain outcomes for the payee.	81
Customer Assurance: Additional functionality for both payer and payee	3	Payers and Payees require additional functionality in order to be able to: <ul style="list-style-type: none"> confirm payee (validation of name or proxy regarding payment account details). 	75
	4	<ul style="list-style-type: none"> confirm adequate funds are available to cover payment. 	81
	5	<ul style="list-style-type: none"> confirm the status of payment. 	75
	6	<ul style="list-style-type: none"> confirm receipt of payment. 	63
	7	<ul style="list-style-type: none"> include additional reference data in the payment (to ease reconciliation). 	69
	8	<ul style="list-style-type: none"> include additional data for third parties (e.g. accounting; taxation and age verification). 	69
Customer financial capability	9	Some financial products are overly complex and lack transparency, leading to avoidance by unconfident users.	75
	10	Access to cash remains important for many users (due to either low or unpredictable incomes or mistrust of electronic payments due to lack of transparency) - and will continue to do so while non-cash products do not meet their needs for control and transparency.	81
	11	Competition is not currently meeting user needs for simplicity.	63
	12	Competition is not currently meeting user needs for transparency.	69
	13	Competition is not currently meeting user needs for control.	81
	14	Competition is not currently meeting the needs of low income / low use users who need simple payment mechanisms and prefer cash.	81

Detriments (cont.)

Detriment Group	#	Detriment	Score
Corporate customers	15	There is lack of realistic alternative payment options other than cards available to merchants / retailers.	63
	16	Online payments – there is a lack of access for business users for alternative rails (i.e. need more availability of credit transfer payment online).	50
	17	Card scheme fines (for which there is no appeals process) are mandated onto merchants.	50
	18	There is a lack of user say in changes mandated from card scheme level - merchants bear costs with no representation at governance level.	50
	19	International payments for Retail and Corporate users are sometimes hard to execute as UK Payment Systems not perfectly connected to international equivalents.	56
	20	Corporate service users would like to know where payments are at all times if it is not real-time.	63
	21	There is a need for greater transparency of users for services in corporate space.	50
	22	Reconciliation costs and treasury management for businesses; also government reporting costs.	63
	23	The distance between physical and financial supply chain affects e-invoicing.	44
	Customer identity, authentication and knowledge	24	A customer's identity is used successfully by a criminal (third party).
25		Customers have day to day concerns about risk of identity theft and risk of fraudulent activity on an account.	63
26		A payment is made to a wrong account.	56
27		There is friction in the payment service. For example: <ul style="list-style-type: none"> • Online payment verification checks, e.g. a '3D Secure' retailer. • Point-of-Sale card payment declined by PSPs fraud systems as a 'false positive'. • Opening a bank account, application is declined due to ID checks. 	56
28		Businesses pay into accounts not owned by their suppliers due to false invoices or false change of bank account notifications.	50
29		The industry need to better understand who the payment initiator (payer) is and paying account.	50
30		The industry need to better understand who the payment recipient (payee) is and the beneficiary account.	50
31		Current ID solution may not be sufficient for proof of identity in criminal cases.	50
32		The industry need to know who their vulnerable consumers are.	69
33		At account opening, where customers are seeking access to payment instruments, the industry need to understand who the applying customer is.	50

Detriments (cont.)

Detriment Group	#	Detriment	Score	
Data sharing, reference data, and analytics	34	Insufficient reference data and a lack of knowledge sharing amongst users results in gaps in preventing financial crime; fraud, money laundering, terrorist financing, bribery and corruption.	50	
	35	Real-time payment risk is limited, reducing the ability of customers and PSPs to act against fraudulent payments. For example, business customers and government departments are constrained in identifying fraud by the lack of information available on the payee / beneficiary account, and the payer / remitter account.	63	
	36	Switching to a new bank means re-doing checks for Know your customer (KYC), anti-money laundering (AML) and anti-terrorist financing.	44	
	37	When a customer actually realises payment is a fraud, banks cannot work quickly together to target mule accounts and to prevent funds being paid away.	63	
	38	Banks cannot make fully reliable risk decisions on third parties because they cannot be 100% sure of identity and information about them.	50	
	39	A beneficiary bank has limited information about a remitter, the reason for payment and the network of accounts the beneficiary account transacts with - impacting its ability to identify accounts used to receive proceeds of fraud.	50	
	40	Banks cannot comply easily with KYC, AML or anti-terrorist financing requirements on their own customers or on third parties.	56	
	41	Unnecessary bank secrecy prevents effective control of money laundering.	50	
	International payments and account activity	42	There is a lack of clarity regarding the speed, costs and risks of international payments.	50
		43	Bank account access - opening or maintaining account facilities - regulatory burden is different, and variable, in different territories.	50
44		The perceived risk of fraud is higher for international payments e.g. businesses pay into accounts not owned by their suppliers due to insufficient ability to confirm payee identity and beneficiary account.	50	
45		The customer identity and data sharing approach for international payments is less robust than that for UK-UK payments.	50	
46		There is a lack of understanding of the ultimate beneficiary owner (UBO) and robustness of KYC.	56	
47		There are issues around the emergence and growth of alternate PSPs and methods where regulation is less robust, and banks have limited control, e.g. blockchain, cross-border payments being made under the disguise of domestic payments (Hawala-type payments), giving rise to consumer safety issues and money laundering opportunities.	56	
48		Using the name of legal entities or individuals is not sufficient to uniquely identify them across jurisdictions.	50	

Detriments (cont.)

Detriment Group	#	Detriment	Score
Payment scheme issues/ weaknesses	49	There is insufficient merchant education and understanding on fraud levels and best practice for engaging with Payment Schemes.	44
Customer education and awareness	50	There is a lack of customer awareness about mule accounts for avoiding 'non-complicit' involvement and criminal implications of complicit involvement.	56
	51	There is a lack of customer awareness of widespread methods used for fraud - such as duped customer payments (e.g. caller requesting remote access to PC, romance scams, pension liberation, invoice diversion, ghost payroll, etc.).	63
Choice and competition	52	There are only a small number of sponsor / commercial solutions for indirect PSPs.	56
	53	Consumers have little choice if they require a PSP with real-time Faster Payments (FPS). There are 10 members of FPS and only these banks offer real-time FPS to their customers. If customers want real-time payments, they need to bank with one of the 10 members.	69
	54	Existing sponsor banks can limit competition as there are only a few that offer indirect access; indirect PSPs are reliant on the Sponsor Bank solution and innovation.	69
	55	It's difficult for PSPs to switch indirect access providers as Sponsor Banks' solutions may make it difficult to switch to another provider.	56
	56	New types of PSPs may encounter difficulties in finding direct PSPs to sponsor them and get access to a payment system, due to having new models where current sponsor bank risk appetite will not support such entities.	69
	57	There is a lack of competition between schemes.	25
	58	There is a lack of interoperability and common standards in the payments infrastructure which reduces the ability for PSPs to innovate and businesses to benefit from new payment options.	63
	59	There is no level playing field for PSPs that are not a credit institution due to difficulty in obtaining a BoE settlement account as a new direct participant.	56
Common standards and rules	60	Too many standards and too much complexity reduce front end simplicity and stifle innovation, unlike the EU where the Single Euro Payments Area (SEPA) has aligned rules for DC / DD.	75
	61	Different rules and standards within EU to the UK; SEPA has largely aligned EU standards / rules for DC / DD and should do for instant (real-time) payments. Still in-country variances.	56
	62	The range of standards could limit infrastructure competition. If operators set the rules, there could be multiple infrastructure providers, provided they are all aligned to an ISO standard.	69
	63	There is no real substitutability between payment systems in the event of system failure.	69

Detriments (cont.)

Detriment Group	#	Detriment	Score
Schemes for rules and governance	64	Indirect PSPs don't own the schemes so change and governance of schemes is driven by big banks. There is no effective voice for indirect participants' views to be taken into consideration by the schemes.	56
	65	There is no clear / transparent on-boarding process or requirements for PSPs to join a scheme and the process can be lengthy and costly for participants to join. Scheme rules are too complex, therefore expensive to join and / or comply with.	88
	66	There are expense implications for card issuers / acquirers to be direct members of card schemes.	63
	67	Multiple payment schemes are expensive, complex and time consuming to join for PSPs and confusing for end-users. Cheque imaging is an added scheme, which risks this reinforcing the multiple operator model.	88
	68	Card scheme governance does not adequately represent merchants and can be inflexible when translating USA-based rules into rules for EU firms.	38
Third party	69	Third party users (end user PSPs) can't initiate real-time payments and access data as they have difficulty gaining access.	50
Switching	70	Consumer and corporate users are reluctant to switch bank accounts which increases costs of banking to end users.	69
	71	The need to change sort code and account numbers when switching bank accounts creates difficulties for customers making payments / companies receiving and causes loss of competitiveness in banking provision.	75
Innovation and Competition	72	Banks are not good at innovating – the external market should innovate.	75
	73	There is no long term strategy for blockchain.	50
	74	New technologies –there is a lack of products not running on old 'rails' (i.e. 4-party-scheme model). Need to make it easier for new entrants to get established in the market.	69
	75	There is a lack of competition between schemes.	75
	76	Mobile payments – lots of closed applications for payments that are not interoperable higher up the chain making life complex for consumers.	63
DD Guarantee	77	Unlimited Direct Debit (DD) guarantee makes it difficult to provision for risks or acts as a barrier for non-direct PSPs and end-users to offer the service.	69
Data theft	78	Consumer data is exposed to theft at multiple points along the value chain, leading to increased fraud.	69
Fraud	79	Merchants have little information on fraud levels and no appeals process for card scheme fines.	69
Localisation	80	Card scheme rules need to be localised.	25
Execution Risk	81	Execution risk – the more change we add into the system, the greater execution risk in the climate of cybercrime.	38
Choice and competition	82	New third party providers can't initiate payments and access data to initiate payments.	69
Localisation	83	The USA centric model doesn't translate to EU regulatory framework – e-money is missing, for example.	25

Appendix 3 – Solutions

End User Needs - Request to Pay

What is the solution?

- The proposal is for payment requests to be sent between entities prior to the payment itself (e.g. from an SME to a customer).
- The request for payment would include more information than is currently possible (e.g. the amount requested, the timeframe for responding, the preferred method of payment etc.)
- The payee's PSP will send payment request instructions to the payer's PSP using an agreed messaging standard.
- The payer's PSP will present the payment request to their customer, who will have the ability to accept, decline, hold or respond to the Request for Payment.
- The Payer will have the ability to respond to the requested (e.g. informing them that they intend to pay an amount different to the original request).
- Request for Payments could function in real-time.
- A central database with agreed standards will be required.
- The legal framework for user rights will need to be developed (e.g. to deal with cases of error or misuse).
- PSPs, regulators and end users would need to be involved in the solution's development and operation.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach to establishing a minimum customer proposition for the solution and a competitive approach to the provision of request-to-pay services.

What are the alternative solutions?

- Current payment types such as Direct Debit will continue at first and competition will determine which payment type(s) are used in the longer run.

What are the key risks and dependencies?

- There is a risk that the market chooses not to implement or adopt 'request-to-pay'.
- The key dependencies 21-3of this solution are the implementation of PSD2 and Open Banking. The technical standard of the proposed framework would need to encompass and be conscious of how payment schemes adopt these two initiatives.
- There is a risk that corporates do not want to move away from their current payment method.

Further information about this solution can be found at:

www.paymentsforum.uk/eun-wg-report

End User Needs - Assurance data

What is the solution?

- The proposal is to enable assurance of both customer identity and the status of payment. In any transaction, the payee's PSP will send notifications to the payer PSPs regarding:
 - The receipt of payment
 - The processing of payment
 - The final settlement of payment
- The solution should allow payer's to track the progress of a payment they have sent.
- The solution will require participation by both PSPs and regulators
- The solution will assure payer's that the payment was received by the intended recipient. It could also give payers the opportunity to have some control over how the beneficiary uses the payment

Is it competitive or collaborative?

The proposed solution takes a collaborative approach to establishing a minimum customer proposition for the solution and a competitive approach to the provision of assurance data services.

What are the alternative solutions?

- Potential solutions include:
 - Validating the payee based on previous transaction history held by scheme.
 - An industry-wide proxy service such as phone numbers and emails that would leverage KYC data at each end of the transaction.

What are the key risks and dependencies?

- Data protection requirements will need to be balanced against the need to provide a simple customer experience as well as attempts to prevent financial crime and phishing.
- The key dependencies of this solution are the implementation of PSD2 and Open Banking. The technical standard of the proposed framework would need to encompass and be conscious of how payment schemes adopt these two initiatives.

Further information about this solution can be found at:

www.paymentsforum.uk/eun-wg-report

End User Needs - Enhanced Data

What is the solution?

- The proposal is to for PSPs to have the capacity to attach data to a payment to allow a recipient to easily identify what the payment relates to. This would ideally be done using unique references.
 - Data could include pictures, data files, remittance information etc.
 - Consumers should be able to review the information linked to payments through multiple channels
- The solution will be developed in three stages:
 - Fuzzy matching – the Payer's PSP will be able to respond to the Payee's PSP to confirm that extra data sent alongside a payment has been mapped and is error free.
 - Adding the extra assurance data to existing payment schemes
 - Enabling reference data to be fully reconciled through the new Simplified Payment Platform

Is it competitive or collaborative?

The proposed solution takes a collaborative approach to establishing a minimum customer proposition for the solution a competitive approach to the development of richer data products

What are the alternative solutions?

- Potential solutions include:
 - Validating the payee based on previous transaction history held by scheme.
 - An industry-wide proxy service such as phone numbers and emails that would leverage KYC data at each end of the transaction.

What are the key risks and dependencies?

- Data protection requirements will need to be balanced against the need to provide a simple customer experience as well as attempts to prevent financial crime and phishing.
- The key dependencies of this solution are the implementation of PSD2 and Open Banking. The technical standard of the proposed framework would need to encompass and be conscious of how payment schemes adopt these two initiatives.

Further information about this solution can be found at:

www.paymentsforum.uk/eun-wg-report

Financial Crime, Data & Security - Customer awareness and education

What is the solution?

- A priority issue in financial crime prevention is the ability of consumers and businesses to identify and understand the methods by which criminals seek to exploit them in order to obtain or launder money.
- The proposed solution is to develop an education and awareness programme on financial crime risks for end users. It will build on the existing campaigns to take a central co-ordinated approach to streamline activities and avoid unnecessary duplication and cost.
- The programme should include information and guidance for end users on:
 - How to protect themselves from becoming a victim of financial crime.
 - The risks from becoming involved in financial crime and fraud (e.g. by becoming involved in mule account activities).
 - How payment systems can protect customers from financial crime.
- The education and awareness campaign will need to target customers in many different groups including: consumers, businesses, charities and, public sector organisations.
- For consumers, key groups include vulnerable customers, students at school and college and young people using payment services for the first time.
- The proposed programme will include:
 - Immediate term elements, which would provide regular, consistent, joined up messages to educate consumers and businesses about the risks of financial crime and how to protect themselves against them.
 - This should be coordinated through the Multi-Agency Campaigns Group which is currently facilitated by The City of London Police.
 - Longer term elements, about the protection provided by the industry using the payment system infrastructure.
- The participants of the solution include the Multi-Agency Working Group (who will have oversight, manage and maintain an up to date central repository of planned activities), contributors to a communications diary to be defined, as well as the End User Working Group.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach where participants work together to agree a schedule of awareness activities and collectively produce material for it.

What are the alternative solutions?

The solution is an extension to work currently done by the key contributors of the Multi-Agency Campaigns Group.

What are the key risks and dependencies?

The solution needs to align with the work and key messages of the Multi-Agency Campaigns Group.

Further information about this solution can be found at:

www.paymentsforum.uk/fcds-wg-education-and-awareness

Financial Crime, Data & Security - Technical standards for identity verification, authentication and risk assessment

What is the solution?

- The proposal is to establish a technical standard to define and recognise the key capabilities that Payment Service Providers need to bring to bear and the principles of operation related to identity. This includes the key principle of risk-assessment of payment and payment-related transactions.
 - The Technical standard will cover: 1) identity and verification related to account opening and making a payment; and 2) all payment types and all payment channels.
 - The governance of the solution will comprise of a technical standard which Payment Service Providers will need to comply with and demonstrate compliance with thus providing a common framework for identifying and verifying the identity of individuals and businesses when opening accounts, making payments, or communicating with a Payment Service Provider.
- The development of the standard would be relatively simple to achieve but its implementation by Payment Service Providers would be more complex and will take time.
- Payment Service Providers with simpler business models will find the implementation of the new standard less onerous.
- The participants of the solution would be Payment Service Providers and regulators.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach where participants work together to establish and agree to adopt a new data standard.

What are the alternative solutions?

- There are no similar international standards with the proposed breadth of scope of this solution but applicable rules exist in other countries.

- There are a number of solutions in development which would fit this framework but the standard does not preclude their inclusion or future inclusion. Initiatives includes:

- MIDAS alliance
- TISA financial services digital ID initiative
- Implementation of eIDAS.

What are the key risks and dependencies?

- Establishing a technical standard for Payment Service Providers will overlap with a number of existing and proposed legislation and rules such as (but not exhaustively):
 - Payment Services Directive II (2015)
 - European Banking Authority Regulatory Technical Standard on Strong Customer Authentication (TBC)
 - Joint Money Laundering Steering Group (JMLSG) guidelines on anti-money laundering and sanctions screening
 - Related UK legislation including Proceeds of Crime Act (2002), Modern Slavery Act (2015).
- There are a number of industry relevant standards that will overlap with the proposed solution including (but not exhaustively):
 - Gov.UK Verify operating rules
 - Open Identity Exchange (OIX) model of Identity Exchange Attribute Exchange.

Further information about this solution can be found at:

<http://www.paymentsforum.uk/fcds-wg-all-solutions-description>

Financial Crime, Data & Security – Payment transaction data sharing and data analytics

What is the solution?

- The proposal is to create a pooled data set of payment transactions to be produced through collaboration. The solution would include:
 - A centralised storage facility and analytical capability which would reside with a public body.
 - Data sharing compliance and controls would be established as well as analytical capabilities to extract and distribute actionable insights, with governing body oversight.
- This is a technology and governance-based solution that impacts Payment System Operators, Payment Service Providers and Payments System Users (PSUs).
 - The competitive market will find a solution provider but collaborative sharing and use of data will be required.
- Long-term, the solution requires mutual agreements and legal considerations (e.g. data protection) that will need to evolve over time.
- The solution's participants are Payment Service Providers and regulators concerning APIs and data access.

Is it competitive or collaborative?

The proposed solution takes two approaches: 1) competitive where third parties develop the infrastructure and service; and 2) collaborative where participants work together to establish and adopt a data sharing framework.

What are the alternative solutions?

- There is a wide set of industry bodies and related initiatives that are relevant that provide the opportunity to collaborate, these include:
 - CIFAS, Joint Fraud Taskforce, FFA UK, BBA – FCAS, Fraud Intelligence Sharing Systems (FISS), National Fraud Intelligence Bureau (NFIB), etc.
- VocaLink has established big data analytics business, Payments Data Insight (PDI), and has proven capability within sector. Developments here may be in competition with this solution.

- Alternative solutions were considered:
 - A central data repository with analytical capability residing with individual Payment Service Providers; storage facility owned by independent entity and data being available via an API
 - A fully competitive solution would be problematic as it would be difficult to apply the correct level of control and governance.

What are the key risks and dependencies?

- The solution is dependent on:
 - Payment System Operators and data owners providing access to payments data, defining how data will be consumed and agreeing rules and standards
 - Payment System Operators need to support data sharing
 - Data Protection Act guidelines in how customer data is used and opt-in requirements
 - Payment Services Directive II in terms of: new IT security requirements; requirement for 3rd party access to payment accounts and payment account information; and requirement for access to payment systems and reducing barriers to ensure 100% subscription
 - Open Banking Standards delivery.

Further information about this solution can be found at:

www.paymentsforum.uk/fcds-wg-all-solutions-description

Financial Crime, Data & Security - Financial crime intelligence sharing

What is the solution?

- The proposal is to improve financial crime intelligence sharing and industry co-operation:
 - Sharing of typologies/trends etc. for Fraud and AML
 - Sharing of confirmed fraud data
- Typology, trends, factors concerning financial crime across various Payment Service Providers are shared across a central repository system.
 - The central repository would be available for consultation for free, providing they are providing data according to standard and in line with payments volume.
- Currently, there is a lack of standard rules and governance for organisations to work together to stop fraudulent money transfer.
- The solution's governance would be technology based:
 - Mandatory sharing of confirmed fraud data through existing fraud reporting groups (Action Fraud, FFA UK, CIFAS); each reporting groups' data to be combined
 - Shared analytical capability to represent on the Joint Money Laundering Intelligence Taskforce (JMLIT).

Is it competitive or collaborative?

The proposed solution takes a collaborative approach where participants agree to share information with a central repository and adopt a shared analytical capability.

What are the alternative solutions?

There are significant regulatory barriers in sharing customer and/or transaction level information and thus no alternative solution in the market exists..

What are the key risks and dependencies?

- There is a risk of this solution repeating much of the work that is already going on in the industry:
 - Payment Service Providers already share a lot of data under the legal framework
 - There are initiatives to reform the Suspicious Activity Reports (SARs) regime.

Further information about this solution can be found at:

www.paymentsforum.uk/fcds-wg-all-solutions-description

Financial Crime, Data & Security – Trusted KYC data sharing

What is the solution?

- The proposal is to have a central repository that stores data and documents required to support a Financial Institution's (FI) Know Your Customer (KYC) procedures
 - When a business customer first establishes a relationship with a FI, the FI would request KYC data from the central KYC utility
 - The central KYC utility would provide KYC data on that customer that has been classified and verified based on the type of customer
 - The central KYC utility would be the primary holder of customers' KYC data
 - Each subscribing FI would provide updated information about the customer to the central utility.
- The method of delivery of KYC data would be through a cooperative solution – this will be a more acceptable proposition to international audiences than from a Government or for-profit organisation.
- The solution's participants are financial institutions.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach where participants agree to adopt a newly established governance framework and to share information within it. The delivery of the infrastructure and service, however, could be competitive.

What are the alternative solutions?

- There are numerous market initiatives offering FIs the ability to collaborate and retrieve customer information during customer on-boarding. These include:
 - SWFIT KYC Registry
 - Startups such as miCARD and Trunomi.
- Three other solutions were considered but not progressed as they did not materially improve the detriments:
 - KYC sharing between FIs: institutions share KYC information amongst themselves
 - Customer to FI sharing: onus on customer to

create and maintain a KYC master record and FIs to pull information during on-boarding

- Central KYC utility registry model: central index to point FIs to where data can be sourced, e.g. from another FI.

What are the key risks and dependencies?

- The solution requires FIs to invest in internal data transfer capabilities so as to be able to receive and store KYC data.
- The solution's implementation depends on the proposed ID&V solution and regulatory initiatives – any changes in these may affect the scope of this proposal.
- The central KYC utility is dependent on:
 - Data protection legal frameworks
 - Approach in respect of the Data Protection Act for use of customer data in order to tackle Financial Crime, e.g. whether customers would need to opt in
 - Regulatory consent to implement and use a cCentral KYC facility
 - Central ID as a utility with which to link the KYC information to optimise any delivery
 - PSD2 – new IT security requirements; and 3rd party access to payment accounts and payment account information
 - Open Banking Standards delivery.

Further information about this solution can be found at:

www.paymentsforum.uk/fcds-wg-all-solutions-description

Financial Crime, Data & Security – Enhancement of sanctions data quality

What is the solution?

- The proposal is for the industry to pursue an agenda for the Treasury to adopt the Advanced Sanctions Data Model:
 - An Advanced Sanctions Data Model has been developed by the UN 1267/1988 Security Council Committee to enhance the quality of sanctions list entries and their effectiveness
 - The model provides a linguistic basis for the storage and classification of sanctions entity information and covers different scripts, transcriptions and cultural variances
 - A sanctions list entry with detailed, clean and structured data enables more accurate detection and thus fewer false positives when identifying an individual or an organisation.
- The requirements for sanction screening extends beyond Payment Service Providers but the solution must be inclusive to all Payment Service Providers regardless of size, channel and payment service provided.
- Additionally the solution should be supplemented by:
 - Data improvements
 - Process improvements.
- The solution's participants include the Treasury and the Office of Financial Sanctions Implementation (OFSI).

Is it competitive or collaborative?

The proposed solution takes a collaborative approach where participants agree and adopt a new standard.

What are the alternative solutions?

- The US Office of Foreign Assets Control (OFAC) implemented the Advanced Sanctions Data Model in 2016 and the UN is currently initiating a project to implement the model within the next 18 months.
- There are a number of data vendors that focus on

improving the quality of Sanctions list data. These vendors include:

- Dow Jones - provides an enhanced data file, called the Dow Jones Watchlist, which consolidates a number of sanction lists, PEPs and adverse media records.
- Thomson Reuters - provides an enhanced data file, called World-Check, which consolidates a number of sanctions lists, PEPs and adverse media records.
- Innovative Systems - provides a service (FinScan List Management) for improved data quality for specific sanction lists.

What are the key risks and dependencies?

The key dependency for this solution is the agreement of the Treasury to adopt the Enhanced Advanced Sanctions Data Model.

Further information about this solution can be found at:

www.paymentsforum.uk/fcds-wg-all-solutions-description

Simplifying Access to Markets – Access to sort codes

What is the solution?

- The proposal is that Bacs, in its role as operator of Bank Reference Data, makes a new range of sort codes available, to remove the dependency for new Payment Service Providers to obtain these from existing direct participants (who may be competitors).
 - This will be achieved by a combination of Bacs setting up a utility bank to hold sort codes, and a VocaLink technical release in April 2016, which enabled support for these new sort codes. The sort code range beginning '04' has initially been allocated for the utility bank to administer
 - New participants of Faster Payments, Bacs and CHAPS can be allocated one or more of these 04 sort codes
 - Further technical changes are required to accommodate PSPs who require a sort code (e.g. in order to generate UK IBANs) but who do not want to participate in any of the above payment systems
 - With the involvement of the cross-scheme Clearing Codes Management Group, Bacs will continue its strategic review of the governance and operating model for Bank Reference Data.
- In the longer term (within five years) it should be considered whether sort code governance should be run and governed independently from Bacs – this may require a new technical solution.
 - A tactical approach should remain the priority in the near-term, with Bacs well placed to deliver this on behalf of the industry.
- Work is already underway to improve the availability of sort code information.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach.

What are the alternative solutions?

The tactical measures described above should be the priority, with Bacs being well placed to deliver these on behalf of the industry. Potential alternative strategic approaches to Bank Reference Data may be considered in the longer term as part of wider industry change.

What are the key risks and dependencies?

- There is a dependency on VocaLink to deliver technical changes on time
- There is a dependency on Bacs to develop procedures and communications on a timely basis
- Cheques will be sort-code constrained until the new Image Clearing System (ICS) for cheques is implemented
- A risk to the solution is that there is a shortage of sort codes available for allocation to new PSPs
 - Only around 20,000 of a theoretical one million sort codes are currently allocated for use. Once the lead pair issue is resolved, there should be no material constraint on the number of sort codes available.

Further information about this solution can be found at:

www.paymentsforum.uk/sam-wg-%E2%80%93-sort-code-availability-final

Simplifying Access to Markets - Aggregator access models

What is the solution?

- The proposal is to establish a range of competing, commercially developed solutions to improve access to payment systems.
- The access solutions would be accredited for use by, or on behalf of, the payment system operators (PSOs).
- Technology providers would facilitate access to payment systems for PSPs through a standard common connectivity approach. These solutions would enable PSPs to access multiple payment systems through a single provider. It would also allow these solution providers to support multiple PSPs.
- The solution complements and is supportive of the findings of the recently published, PSR Interim Report: *Market review in to the supply of indirect access to payment systems*.
- The Interbank Scheme Coordination Committee (ISOCC), the PSR, trade associations, payment system operators, aggregators and settlement providers could all participate in the development and operation of this solution.
- This model is already live for Faster Payments and will be operational by the end of 2016. BACS is currently in the process of consulting on an appropriate model.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach to the establishment of a common connectivity approach by the operators and a competitive approach to the provision of aggregator services.

What are the alternative solutions?

Several aggregator solutions currently exist in the market or are in development. These are capable of supporting both direct and indirect access to any payment system

operator through a single gateway. These include, for example:

- LINK, who already provide an aggregator service to eight participants.
- FPS who has been working an effective aggregator for the past two years and has extended the model.
- FinTechs have also started to offer a range of propositions.

What are the key risks and dependencies?

- There is a dependency on operators being willing and able to work collaboratively whilst recognising they operate in a competitive environment.
- Operators must make the necessary changes proposed to allow cost effective, efficient and speedy connection for aggregators.
- There is a risk that operators may choose not to participate.
- It is likely that the aggregator requirements for card schemes may be different to interbank operators' models.
- Clarity is needed to ensure liability positions for aggregators and their PSPs are clear and understood.
- Aggregators' buy-in is crucial for this solution and they need to be able to create an economic model, which works in both the short and long term.

Further information about this solution can be found at:

www.paymentsforum.uk/sam-wg-%E2%80%93-aggregator-solution-final

Simplifying Access to Markets - Common Payment System Operator participation model and rules

What is the solution?

- The proposal is to minimise non-essential differences between payment system operators' BAU procedures, on-boarding processes and terminology. This should reduce the complexity, time and cost for payment service providers (PSPs) that want to become direct members of multiple operators. It should also simplify processes for PSPs for existing members.
- The proposed solution is to have a common operator participation model except where a different approach is justified. Ten areas of collaboration form the basis of the solution:
 - Common technology and infrastructure terminology across Payment System Operators.
 - Common eligibility criteria and baseline requirements for every Payment System Operator.
 - Common categorisation of Payment System Operator participants.
 - Common articulation of payment products, their features and characteristics.
 - Common connectivity models across Payment System Operators that facilitate easier on-boarding.
 - Improving awareness, involvement and communication with indirect participants.
 - Considering how rules differ across Payment System Operators and whether they need to.
 - Gaining clarity on the differences between Payment System Operators' technical requirements.
 - Managing the risk that new or existing participants bring to Payment System Operators.
 - Improving access to information and documentation to help Payment Service Providers and advisors (recognising that some PSPs and operators may enter into non-disclosure agreements).
- The proposed solution will involve the Interbank System Operators' Coordination Committee (ISOCC), payment system operators, trade associations and other industry bodies.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach where Payment System Operators and participants agree to work within a newly established governance framework. The solution should enable increased competition between PSPs.

What are the alternative solutions?

Individual Payment System Operators have begun assessing how they can improve access and simplify participation as part of their compliance with the PSR's General Directive 2. The ISOCC developed a plan which commenced in April 2016 and some collaborative work between operators has already commenced. For example, sort code allocations, PKI solutions, Faster Payments aggregator approach, and the BACS Access Strategy.

What are the key risks and dependencies?

- The solution will require effective collaboration between PSPs, operators, industry and regulatory bodies.
- Payment system operators may need to gain agreement from their Bank of England Financial Stability Supervisor and the Bank may need to agree what can be 'common'.
- Three of the seven HMT-designated payment systems are supervised by the Bank as systemically important financial market infrastructures. For these operators, the Bank applies the CPMI-IOSCO FMI principles overlaid with additional requirements based on its view of the systemic risk of each system.
- Other regulatory and industry initiatives may impact the ability of operators to deliver the desired commonality (e.g. C&CCC delivery of the Image Clearing Service).

Further information about this solution can be found at:

www.paymentsforum.uk/sam-wg-common-participation-models-and-rules-final

Appendix –

www.paymentsforum.uk/sam-wg-appendix-1-isocc-approach-310516-participation-models-final

PSO Governance Sub Group – Establishing a single entity

What is the solution?

- The proposal is to consolidate Bacs, Faster Payments, and C&CCC into one PSO entity with responsibility for:
 - Managing their rulebooks. In the short term the overarching governance of the PSOs would be combined. The long-term aim would be integration of the three rulebooks into one over time, building on the Common Payment System Operator Participation Model and Rules Solution.
 - Procurement of infrastructure services.
 - A single entity would provide a more strategic and joined-up approach to the development of the retail interbank payment systems.
 - One of the objectives of the entity would be to deliver increased interoperability, which should improve systemic resilience and potentially enhance competition in the downstream retail market.
 - Card schemes, CHAPS and LINK are out of scope for this solution. The other (interbank) PSOs were viewed as utilities which facilitate and enable competition rather than as entities which compete with each other.
- The new entity would need to be monitored to ensure that conflicts of interest that could arise from having control of both the rulemaking and procurement functions are appropriately managed.
 - This potential conflict may undermine incentives to pursue significant reform, forming a barrier to change and innovation
 - Important considerations around consolidation would be Board constitutions and representation, senior management appointments, new objectives for resilience, operational effectiveness, and organisational culture.
- The organisations involved in taking forward this solution will be Bacs, Faster Payments, C&CCC, and regulators. Further consideration of how Paym and CASS could be affected will be required.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach where participants agree to work towards a new governance framework.

What are the alternative solutions?

- Other options for consolidation were considered:
 - No structural reform – would offer little material improvement to the current state.
 - One consolidated rulemaking entity only, with four infrastructure procurement entities – would offer little added benefit to the current state.
 - Consolidation of Bacs, FPS and C&CCC into two entities: one responsible for rules and the other responsible for infrastructure – too difficult to co-ordinate effectively.
 - One consolidated entity with LINK in scope – LINK remained out of scope because of risks to the organisation's competitive position against the card schemes and its distinct role in supporting cash payments from physical terminals.

What are the key risks and dependencies?

- The Bank of England is undertaking a review of RTGS that could materially affect CHAPS. This is due to report at the end of 2016.
- There is significant change already taking place in the industry, and this reform could risk stretching resources.
- The solution's success is dependent on the underlying culture of the entity.

Further information about this solution can be found at:

www.paymentsforum.uk/psog-sub-group-report

Simplifying Access to Markets – Moving the UK to a modern payment message standard

What is the solution?

- The proposal is to implement a standard framework for transferring payment-related data between Payment Service Providers (PSPs).
- The framework should adopt a common, modern payment standard and serve as an enabler for new solutions that require enhanced data.
- The proposed messaging standard is ISO20022, which allows additional data items and is a globally recognised standard already being adopted by some payment schemes.
- To establish the framework, engagement with the appropriate industry bodies will be required.
- The framework will facilitate the creation of:
 - Payment request instructions
 - Data that can be used to identify the customer and the status of the payment.
 - Data enhancements that will carry more information for consumers and corporates.
- The PSR, in the interim report for its market review into payment systems infrastructure, suggested using international standards to improve interoperability between Faster Payments, Bacs and LINK.
- Both PSP's and regulators may be involved in the development, operation and use of the framework.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach where participants work together to define the framework to be adopted.

What are the alternative solutions?

- Emerging payment products which give the payer more control over when to make the payment and how much to pay did not meet the requirement for industry wide, interoperable and ubiquitous capabilities.
- Some level of minimum product provision would be required to ensure that competition provides appropriate products for all users.
- Potential alternative solutions include: validation of

payee based on previous transaction history held by schemes, an industry-wide proxy service (phone numbers / emails) leveraging KYC data at each end of the transaction, and APIs (e.g. the Paym model or Gov ID).

What are the key risks and dependencies?

- The key dependencies of this solution are the implementation of PSD2 and Open Banking. The technical standard of the proposed framework would need to encompass and be conscious of how payment schemes adopt these two initiatives.

Further information about this solution can be found at:

<https://www.paymentsforum.uk/sites/default/files/documents/PSF14042016%20-%20%284b%29%20Simplifying%20Access%20to%20Markets%20WG%20Executive%20Summary%20%26%20Solutions%20Description.pdf>

Simplifying Access to Markets – Indirect access liability models

What is the solution?

- The proposal is to establish a multi-stakeholder review group to consider the issues around financial crime and access to payment systems. This group would identify work that is underway to address these issues and any gaps that may need to be filled, with the aim of developing a plan of work for addressing relevant issues.
- Anticipated attendees would include regulators (FCA, HMRC and potentially PSR), industry (BBA, AUKPI) and other interested parties with an understanding of financial crime and access issues. Further work is needed to consider who should lead the proposed multi-stakeholder group.
- A non-exhaustive list of potential solutions that could be considered further by the proposed multi-stakeholder review group include:
 - Whether there exists, or can be developed, a clear mapping of parties in the payment chain and an articulation of regulatory and legal responsibilities for each party and where, if a party accesses a payment system via another party, which of them is considered responsible across the payment end-to-end journey;
 - Potential to deliver greater transparency at transaction level for an IAP and an IPSP handling the same payment, such that KYC and AML requirements, responsibilities and liabilities are clear and can be carried out sufficiently and reasonably;
 - Potential to develop clearer defined rules describing what criteria a PSP needs to meet to qualify for a bank account, noting that IAPs will wish to maintain commercial and risk based decision-making ability to allow them to meet their corporate objectives and policies;
 - Consider the introduction of a simplified and standardised accreditation process of direct and indirect access for smaller payment institutions at the time of their authorisation and periodically, potentially through external accredited audit.
 - Consider if a safe harbour option can be developed, to provide assurance to IAPs that they can service IPSP payment traffic without undue liability; and
 - Consider how other players with different risk profile might be encouraged to become IAPs.

Is it competitive or collaborative?

The proposal involves collaboration to determine the true extent of the issues and what work is underway to mitigate these.

What are the alternative solutions?

It is envisaged that the proposed multi-stakeholder group would identify work that is underway to address issues around financial crime and access.

What are the key risks and dependencies?

- The proposal, although relating to access to payment systems, falls under the broad and complex topic of financial crime, where multiple activity is underway, both in the UK, Europe and globally.
- As such there are dependencies on:
 - Developing regulation such as the transposition of the Fourth Money Laundering Directive in to UK law;
 - Current work underway by the FCA on de-risking;
 - Industry financial crime and money-laundering expertise e.g. JMLSG, BBA working groups

Further information about this solution can be found at:

www.paymentsforum.uk/sam-wg-common-participation-models-and-rules-final

Appendix

www.paymentsforum.uk/sam-wg-appendix-1-isocc-approach-310516-participation-models-final

Horizon Scanning – The simplified payments platform framework

What is the solution?

- The proposal is for a new simplified payments platform based on a single rail for push payments, with overlay services built on top. Its key elements are:
 - Using modern messaging protocols
 - Adopting a layered model architecture
 - Overlay services built on top.
- Current Direct Debit function will be unaffected.
- The layered architecture of the design insulates the core payment system from the overlay services that will be developed on top. The adoption of these overlay services will be optional to Payment Service Providers.
- By adopting a holistic approach to the application of new technologies, the proposal should be able to solve the majority of the problems and end user needs identified by the Forum.
- Centralised and decentralised models were considered, as was the use of both new and existing infrastructure. The proposal is to proceed with a decentralised (i.e. distributed) model; using either distributed ledger or more traditional technology.
- The solution is targeted at the technology operations of Payment Service Providers and Payment System Operators and will address the end user needs considered elsewhere. Card schemes (which have different, cross-border payment mechanisms) and the potential consolidation of Payment System Operators are out of scope for this solution document.
- Industry should have two years to outline the design and requirements of the proposed solution and to create a plan for its development, testing and implementation.
- The development and operation of the solution would involve a governance body, members of industry and the Bank of England.

Is it competitive or collaborative?

The proposed solution takes a collaborative approach to the establishment and adoption of the new payment mechanism and standards but a competitive approach to the provision of infrastructure and overlay services.

What are the alternative solutions?

- Further incremental changes could be made to the existing payment systems to meet the user needs identified by the forum.

What are the key risks and dependencies?

- There are a number of dependencies that affect this solution:
 - The Bank of England's review of RTGS
 - The wider strategy of PSR
 - Any future EU regulatory changes
 - Changes to global payment messaging standards
 - Adoption of blockchain technologies and the associated impact on centrally- and globally-regulated banking systems
 - Agreement and support of UK Payment System Operators and Payment Service Providers in adopting the chosen solution

Further information about this solution can be found at:

<http://www.paymentsforum.uk/hs-wg-simplified-payments-platform>

Horizon Scanning – End user APIs and open access APIs

What is the solution?

- The proposal is to have an API Governance framework in the PSP-PSP and PSP-TPP space.
- The API Governance framework should define and develop open API standards, data specifications and operational measures. There are three options for this governance framework:
 - Open-source approach
 - Proprietary approach
 - Hybrid approach.
- An implementation entity is required to develop and oversee the creation and implementation of the open API framework and standards.
- The solution will include:
 - A governance body and standards to manage the development of APIs in combination with PSD2, the open banking initiative and the CMA's proposals following its retail banking market investigation.
 - Standardised processes and procedures for TPP registration, including on-boarding and certification criteria.
 - Standardised approval and testing criteria for the development of TPP solutions.
 - Enhanced data standards under ISO20022.
- The development of these APIs is likely to involve HMT, CMA, FCA, PSR, Payment Service Providers, Payment Processors, Payment Aggregators and the implementation entity itself.

Is it competitive or collaborative?

- The proposed solution takes a collaborative approach where participants agree to establish and adopt a standardised API governance framework.

What are the alternative solutions?

- PSD2 and Open Banking are the key industry and regulatory initiatives within the UK which is already considering similar API-based models.

What are the key risks and dependencies?

- Alignment between the various bodies involved in implementing PSD2 and open banking APIs is vital for adoption and success of this solution.
- The key dependencies are:
 - Co-ordination and alignment with EBA working team.
 - Co-ordination and alignment with the OBWG Steering Committee.
 - Coordinate with the “Implementation Authorities” of the seven banks identified in the recent CMA report on “Retail banking market investigation”.

Further information about this solution can be found at:

www.paymentsforum.uk/hs-wg-api-governance-report

Horizon Scanning – Account Number Portability

What is the solution?

- The Account Number Portability (ANP) proposal considered by the Working Group was for customers to be able to retain their existing account number and sort code when switching from one bank to another
 - The approach considered with regard to making an ANP solution work, was to extend the functionality of the existing Current Account Switch Service (CASS) system. The primary benefit of this approach is the anticipated re-use of previous industry investment in CASS
 - It was identified that such a solution would still require significant internal changes for all PSPs; affecting both those PSPs choosing to 'Opt in' to the ANP service, but also some (potentially fewer) changes affecting 'Opt Out' PSPs. The working mechanisms and operational processes required to support the ANP proposition would not be visible to the PSPs' customers
- The Working Group found that:
 - Industry research has already described in some detail the context and the arguments for and against ANP. Choosing to implement ANP would necessitate further solution analysis and cost benefit analysis.
 - A number of arguments for ANP have been identified, but these arguments do not in themselves guarantee or suggest strongly a significant increase in account switching would be achieved through implementing ANP.
 - There are a number of arguments and considerations which suggest that increased account switching can be achieved through improved PCA propositions and marketing which would pull consumers to switch. ANP does not address behavioural and experiential factors which push consumers to switch PCA providers
 - There would be extremely high costs incurred to implement ANP, and it would introduce significant operational complexity and risk to the industry.
- The Working Group concluded that the arguments

against implementing ANP are significant, whereas those for implementing ANP offered only intangible benefits. It recommended that ANP is not proposed for implementation as part of the PSF's strategy.

Is it competitive or collaborative?

Not applicable.

What are the alternative solutions?

Continued industry investment in the current CASS system, plus potentially extending CASS to offer a B2C solution, may be able to provide many of the suggested benefits of ANP without incurring the same level of costs/risks.

What are the key risks and dependencies?

- The CASS system is a significant dependency as the basis of the alternative solution identified above.
- The risk is that CASS does not receive appropriate investment or attention from the industry and is perceived to fail to meet customer needs in terms of facilitating competition between UK current account providers.

Further information about this solution can be found at:

www.paymentsforum.uk/hs-wg-account-number-portability-report

Appendix 4

Supporting documents

Following are the Working Group documents used to produce this

#	Document	Author	Date	Location
1	EUN WG Report	End User Needs Working Group	July 2016	http://www.paymentsforum.uk/eun-wg-report
2	FCDS WG – Education and Awareness (financial capability)	Financial Crime, Data and Security Working Group	July 2016	www.paymentsforum.uk/fcdis-wg-education-and-awareness
3	PSF Fin Crime WG – All Solutions Description – July 2016	Financial Crime, Data and Security Working Group	July 2016	www.paymentsforum.uk/fcdis-wg-all-solutions-description
4	HS WG Account Number Portability Report	Horizon Scanning Working Group	July 2016	www.paymentsforum.uk/hs-wg-account-number-portability-report
5	HS WG API Governance Report	Horizon Scanning Working Group	July 2016	www.paymentsforum.uk/hs-wg-api-governance-report
6	HS WG Simplified Payments Platform	Horizon Scanning Working Group	July 2016	www.paymentsforum.uk/hs-wg-simplified-payments-platform
7	SAM WG – Sort Code Availability FINAL	Simplifying Access to Markets Working Group	July 2016	http://www.paymentsforum.uk/sam-wg-%E2%80%93-sort-code-availability-final
8	SAM WG Common participation models and rules FINAL	Simplifying Access to Markets Working Group	July 2016	www.paymentsforum.uk/sam-wg-common-participation-models-and-rules-final
9	PSOG Sub Group Report	Simplifying Access to Markets Working Group	July 2016	www.paymentsforum.uk/psog-sub-group-report
10	SAM WG – Aggregator Solution FINAL	Simplifying Access to Markets Working Group	July 2016	http://www.paymentsforum.uk/sam-wg-%E2%80%93-aggregator-solution-final
11	SAM WG Common participation models and rules FINAL	Simplifying Access to Markets Working Group	July 2016	www.paymentsforum.uk/sam-wg-common-participation-models-and-rules-final
12	SAMWG Appendix 1 ISOCC Approach 310516 (Participation Models) FINAL	Simplifying Access to Markets Working Group	May 2016	www.paymentsforum.uk/sam-wg-appendix-1-isocc-approach-310516-participation-models-final
13	SAMWG Executive Summary & Solutions Descriptions	Simplifying Access to Markets Working Group	April 2016	https://www.paymentsforum.uk/sites/default/files/documents/PSF14042016%20-%20%284b%29%20Simplifying%20Access%20to%20Markets%20WG%20Executive%20Summary%20%26%20Solutions%20Description.pdf

Appendix 5

Creating design principles for the development of payment systems

Draft principles for the collaborative development of payment services

Projects to develop UK payment services reflect and respond to consumers' needs. In order to reduce the likelihood of future detriments being created, in particular for end user the Forum is proposing the following principles are used as the basis for the development of payment systems.

• They recognise the diversity in consumers' situations and experience	They reflect that levels of financial capability amongst UK consumers vary and how consumers' situations and preferences impact how they manage their money day to day.
• They engage with the UK Financial Capability Strategy	They should build relationships with a range of organisations representing the diversity of consumers' interests.
• They add to the evidence base	Conducting their own research with consumers and sharing relevant insights with the sector.

Projects develop UK payment services in an inclusive way that enhances consumers' ability to manage their money day to day.

• Consumers' interests are appropriately represented in the development and decision-making process	Consumers and organisations that represent them are involved in the development process. Analysis of expected impacts on a diverse range of consumers' ability to manage their money day to day is undertaken and published.
• Services are designed to be inclusive of the least capable wherever possible	They should be easy to use, accessible and minimise the need for user education. As a result they better serve all consumers.
• Services are responsive to end users' financial capability and how users actually manage their money day to day	They facilitate all consumers to manage money day to day and transact in a way that suits them. They seek to protect consumers from financial crime and minimise opportunity for user error.
• The impact of payment services on consumers' ability to manage their money day to day is evaluated	When new or enhanced payment services are trialled their actual impact on a diverse range of consumers' ability to manage their money day to day is evaluated. The evaluation is published.

Projects to develop UK payment services invest in financial capability interventions that work, where it remains necessary to develop consumers' capability to engage with payment systems.

• System alternatives are considered before seeking to educate consumers	Before investing in financial education seek to 'design-out' the need to educate consumers.
• If it remains necessary to increase financial capability or the need for increased financial capability is identified at a later date, they invest in initiatives that work	The evidence base is consulted and investment is made in approaches that are proven to work or an innovative approach that has the potential to work.
• Interventions contribute to the evidence base	The impact of financial capability interventions on consumers' ability to manage their money day to day is evaluated and learning is shared. The UK Financial Capability Strategy provides guidance and tools to evaluate impact

Next steps

A mechanism for updating the principles and industry knowledge around user needs and emerging best practice will need to be developed in collaboration with the Financial Capability Strategy for the UK.

