

Horizon Scanning Working Group – Detailed Assessment Phase

The Horizon Scanning Working Group has considered the impact of initiatives taking place internationally, regulatory developments and technology themes on the payments markets in the UK with a view to making proposals to the Payments Strategy Forum for further consideration.

The UK payments industry is at an exciting point in its history, forming just one part of a bigger story of global digitalisation. The UK payments industry, while idiosyncratic, is generally a leader in payments innovation and there are limits to what it can learn from its overseas competitors. However, initiatives like the New Payments Platform in Australia are migrating towards a single 'push' scheme and should be kept under observation as the UK may usefully learn something for its own strategy.

By and large most regulatory intervention stems from Europe. The digital agenda and move to e-invoicing set the stage for innovation. The Bank of England's review of its RTGS system considers how technological advances (like Distributed Ledger Technology) could help it meet the needs of the next generation. PSD2 and the associated work by HM Treasury on Open Banking direct the industry to opening up access to the system using APIs. Security and privacy remain key concerns with these continuing to be the greatest risks affecting consumers, alongside concerns over the potential detrimental impact of digital exclusion.

Developments in technology may mean that many detriments identified by the Payments Community could be addressed. Potentially, use of APIs, distributed ledger technology, richer data and identity management could bring benefits to users and PSPs. Some technologies are already being introduced on a competitive basis by card schemes – enabling users such as merchants to avoid onerous regulation by deploying technical solutions like tokenisation.

The current payments systems, while offering many benefits, are not versatile and struggle to respond to user needs. There are barriers to making greater innovations necessary to meet rising customer expectations and access to payments systems. Simplifying and redesigning the core payments systems over time, using layered architecture and APIs would naturally open payments systems to greater participation, foster innovation, improve competition and create greater resilience, ensuring payments mechanisms are fit for the next generation.

1.1 SUMMARY OF CONCLUSIONS FOR THE USER NEEDS WORKING GROUP

User Needs detriments identified by the Payments Community may be somewhat improved by regulatory interventions, which largely stem from Europe. However, the advent of the Payment Services Directive II (PSD2) is likely to have the greatest impact, in opening up access to account data to third parties and hopefully spawning a range of new services to meet customer needs. Means to improving security however could increase unwanted friction in payment services.

Internationally the User Needs Working Group may be interested in BankServ in South Africa which addresses problems related to misdirected payment (UN 12,13 and 14) a. It operates an online Account Verification Service. And Request to Pay, which addresses user needs for control in payments is being worked on in the US. Services like Transferwise largely by-pass the traditional schemes and make remittances significantly cheaper.

Technology offers the greatest opportunity to meet user needs, although security and privacy continue to be over-riding concerns. The development of new technologies like big data analytics, artificial intelligence and improvements in decision making sciences leave consumers vulnerable to new potential detriments. Conversely, APIs, distributed ledgers and layering could ameliorate several detriments related to the key issues of control, transparency, reduction of errors and instant access to information. The way in which those detriments could most likely be resolved would be through a redesign of the core payments schemes based on this technology.

1.2 SUMMARY OF CONCLUSIONS FOR THE SIMPLIFYING ACCESS WORKING GROUP

There are currently a number of regulatory initiatives looking at issues related to access to payment markets in the UK, and directly relevant to the PSF's Simplifying Access Working Group proposals. These include the PSR reviews into the supply of indirect access to markets, and on the ownership and competitiveness of infrastructure provision; PSD2's new requirements obliging payment account providers to open access to third parties and the Bank of England's strategic review of its real-time gross settlement (RTGS) infrastructure. The PSR review of the infrastructure provisional findings includes the view that competition for, and within, the provision of infrastructure is not sufficiently competitive. The proposed remedies include competitive procurement, divestment of PSP shareholdings in VocaLink to remove the vertical ownership that may impede competition and innovation and to ensure interoperability through common payment messaging standards. Technological solutions may help.

Access to payment systems appears easier in some other international payment ecosystems. However, there is a lesser degree of sophistication of some of the payments systems which inherently means simpler access. Developments in Australia (NNP), America (TCH) and Singapore (G3) should be kept under observation. A conclusion of the international scan is that very few countries demonstrated a greater degree of access than the UK or conversely dealt with the fundamental problems associated with the UK system.

Layer modelling and APIs are two specific technologic principles which could significantly achieve a simplification and actual opening up of access to payments schemes to PSPs, along with a move to a single 'push' scheme.

1.3 SUMMARY OF CONCLUSIONS FOR THE FINANCIAL CRIME WORKING GROUP

The Working Group should consider the following regulations in more depth: The 4th Money Laundering Directive which may make it more difficult for high-risk customers and Politically Exposed Person (PEPs) to gain access to financial services; HMT Proposals on digital currencies which may increase the legitimacy around their use; and PSD2's new IT security requirements and work to reduce fraud on direct debits.

The Financial Crime Working Group may usefully learn from international examples which focus on identity and authentication. Initiatives include identity proxies, alternative sign-in methods, national initiatives for identity verification and digital signatures and beneficiary verification (which may help to address misdirected payments).

From a technological point of view many of the detriments identified for the Financial Crime Working Group relate to identity of counterparties and KYC. These issues derive from the often poor quality or simply the lack of sufficient data in the payment instructions that would allow PSPs to perform adequate checks. Improving the amount and quality of data would be a necessary step to solving these issues. Using technologic principles like layering and APIs along with richer data and big data could help prevent and fight financial crime. Should Distributed Ledger Technology be developed, smart contracts may provide for a simpler KYC landscape.

1.4 PROPOSALS FOR FURTHER CONSIDERATION BY THE PAYMENTS STRATEGY FORUM

Bringing together the Horizon Scanning Working Group's overall intelligence gathering and analysis there are a number of key themes emerging. Digitalisation is taking place around the world at a fast pace. Developments in technology could answer many of the detriments outlined by the Payments Community and create solutions which meet the PSF's objectives that payments be secure and resilient, versatile, responsive and efficient. Key themes we believe will resonate with the Forum include: the move to real time, the use of richer data, improved messaging standards, the use of new, well governed APIs, a layered payments architecture and the potential of Distributed Ledger Technology.

The Group has considered what will appear on the horizon in the short (1-3 year term) and the longer term (3+ years). In particular, it has been concerned with developing an outline of what the future could look like for payments. In the short-term the PSF should discuss the following proposals for admission in the strategy:

Short-term proposals:

- Support the work of the Open Banking Working Group; and ensure the necessary leadership and support for Open APIs is in place to enable guidance facilitating compatibility as the schemes and the underlying platforms evolve in the medium to long term

- Implement Richer Data through the inclusion of a reference in the payment message and required APIs
- Implement the 'Request to Pay' APIs and 'Confirmation of Payee' APIs independently of existing schemes to demonstrating an 'Overlay API'
- Support the Bank of England RTGS infrastructure review
- Support the general move to ISO messaging and particularly the move globally to a single, instant 'push' messaging.

Longer-term proposal:

- Simplify the UK payments scheme platforms by following a layered approach to payment systems implementation together with a migration approach using APIs to minimise disruption.

The development of such a simplified scheme platform would allow the flexibility of distributed federated and/or centralised distribution of the technology platform underlying the schemes, allowing for future localised technological evolutions, simpler access and on-boarding and faster innovations without impacting the entire delivery chain. This proposal is described in the solution concept assessments annexed to this document.

- Monitor and co-ordinate efforts to develop Distributed Ledger Technology (DLT) to ensure that correct use cases are followed and the systemic impact is understood.

If it is to be taken forward, developing DLT as an interoperable 'open standard' will still allow for competition in its implementation.

These proposals, taken together, could allow for significant improvement of the UK's payments systems and offer the opportunity to provide a simplified platform enabling many identified detriments to be resolved.

1.5 FOR DISCUSSION

From the main report, solution documents and also the separate ANP report the HSWG recommends that the forum:

- Solution Description – APIs: Work with the Open Banking Working Group to accelerate the production of API standards and accelerate the introduction of APIs in the UK banking market ahead of PSD2 technical standard implementation
- Solution Description – New Scheme Platform: Begin work to extend the work started on APIs to define a new payments scheme platform in the UK based on layering, APIs and distributed ledger technology
- ANP Report: Commission an independent cost/benefit analysis of the specific ANP proposal presented in the report