



HM Treasury

Regulatory Innovation Plan

April 2017



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1.1 The government announced in its 2015 Productivity Plan that departments would be required to work with regulators to publish innovation plans. This announcement reflects the key government aim of ensuring the UK supports the development of new business models and disruptive technologies, breaking down barriers to entry and boosting productivity. To do this the UK's regulation and enforcement frameworks must be agile enough to respond flexibly to continuing developments in new technologies and disruptive business models.

1.2 In April 2016, the government consulted on the draft financial services innovation plan and received 40 responses. This final version of the innovation plan responds to the comments made by firms and individuals during the consultation. The list of institutional respondents are provided in chapter 3.

1.3 The government recognises that the referendum result to exit the European Union raises a number of important questions for the financial services sector. It is the view of HM Treasury that encouraging innovation in financial services is now an even greater priority. This revised innovation plan sets out a number of further actions the financial services regulators are undertaking to create a more supportive and agile regulatory and enforcement framework.

1.4 The innovation plan covers the work of the financial services regulators: **Financial Conduct Authority (FCA)**, **Payment Systems Regulator (PSR)**, **Prudential Regulation Authority (PRA)** and the wider **Bank of England**.

1.5 The innovation plan covers how financial services regulators are adapting and encouraging new technologies and disruptive business models, and better utilising new technologies to reduce regulatory burdens on business.

Innovation plan for financial services

Innovation and regulation

2.1 The government's vision is for UK financial services to be the most competitive and innovative in the world, supplementing existing services with greater choice and value for consumers.

2.2 The government has already taken significant action to reach this vision. This includes:

- working with regulators to substantially **lower barriers to entry** by making it quicker and easier for new, innovative firms to enter the market. The introduction of Project Innovate within the FCA and their subsequent Innovation Hub and Regulatory Sandbox initiatives have been heralded as world-leading regulatory interventions to support the development of FinTech
- driving industry to deliver the **Current Account Switch Service (CASS)**, so customers can switch current accounts where they see a better deal – simply, quickly and reliably. Customers have switched over 3.5 million times since CASS was launched in 2013
- legislating to require the big banks to **share SME credit data** so alternative finance providers, including FinTechs, are more able to compete and make effective lending decisions. This, combined with the **finance platforms referrals policy** launched in November 2016, will enable SMEs to access finance more easily through alternative providers
- supporting industry to develop an **open banking standard** for application programming interfaces (APIs), following the publication of the Competition and Markets Authority (CMA) retail banking market investigation. An open banking standard will create an ecosystem that allows authorised third parties to access bank data, allowing the delivery of innovative services tailored to customer needs. This will allow customers to make better use of their financial data, and more easily compare financial products and services. The CMA required the 9 largest UK banks to develop and adopt a full open API banking standard by Q1 2018

2.3 Creating the right regulatory environment is important to ensure that innovative firms can compete and grow. To this end, HM Treasury has firmly embedded competition and innovation objectives in the regulatory landscape for financial services through the main regulators' objectives and remits.

- The **Financial Conduct Authority** has a duty to promote effective competition, so far as that is compatible with its consumer protection or market integrity objectives. It also has an operational objective to promote effective competition in the interests of consumers in the markets it regulates.
- The **Payment Systems Regulator** is an independent subsidiary of the FCA, and has a specific objective to promote innovation in the UK payments sector. This complements its two other objectives to promote effective competition in the markets for payment systems and associated services, and to promote the interests of actual or likely users of services provided by payment systems. The PSR has strong

powers over the main interbank and international card schemes to promote these objectives.

- The **Prudential Regulation Authority** is a part of the **Bank of England** and has a secondary competition objective to act, as far as is reasonably possible, to facilitate effective competition in the markets it regulates when discharging its functions in a way that advances safety and soundness and insurance policyholder protection.

2.4 The FCA, PRA and PSR produce annual reports on how they are delivering against their respective competition objectives. The first of these have been published and describe in further detail the steps the regulators have undertaken to promote competition, many of which are set out in the innovation plan below.

How new technology is shaping financial services

2.5 Financial services innovation in recent years is characterised by the strong growth of FinTech – technology solutions which deliver financial services – within the UK. Technology has enabled a diverse range of FinTech services, including:

- enabling consumers to make payments via their smartphones
- directly matching those with money to invest with those who need to borrow
- personalised insurance pricing based on the characteristics and behaviours of individual consumers
- the development of new digital currencies
- the ability to on-board customers with thin credit histories
- budgeting apps which are helping consumers take control of their finances

2.6 FinTech operates in many areas of financial services and the potential for technology to transform financial services is substantial. Research into investment in UK FinTech in 2015 picked out nine different areas of FinTech which received investment. The biggest of these were peer-to-peer lending (22%), money transfers and foreign exchange (19%), and online-only challenger banks (14%).¹

2.7 FinTech is characterised both by firms looking to compete with existing financial services firms and those looking to collaborate with them. There has been a shift in recent years towards greater collaboration between banks and FinTechs, as well as a shift within some larger firms towards greater research and development.

2.8 The level of support for FinTech by the UK's regulators and the government has resulted in the UK's position as the world-leader in FinTech development – ahead of other leading hubs like Silicon Valley, New York and Hong Kong.² This has been reconfirmed in a more recent report by Deloitte, which placed London as the world's leading FinTech hub, alongside Singapore.³

2.9 The UK's FinTech sector has been growing rapidly. In 2015, FinTech investment in the UK grew to £524 million – almost half of all European investment. The high-growth UK FinTech sector contributed £6.6 billion to GDP in 2015 and employed 61,000 people.⁴ If we include

¹ Innovate Finance (2016), The 2015 FinTech Investment Landscape

² EY (2016), UK FinTech on the Cutting Edge: An evaluation of the international FinTech sector

³ Deloitte (2016), Connecting Global FinTech: Hub Review 2016

⁴ EY (2016), UK FinTech on the Cutting Edge: An evaluation of the international FinTech sector

traditional FinTech (large technology vendors supporting financial services providing the existing infrastructure) the sector contributed more than £20 billion to GDP in 2015.⁵

How financial services regulators are adapting to new technologies and disruptive business models

2.10 This section outlines how each financial services regulator plans to support and promote innovation, facilitating the development of new technologies and disruptive business models in financial services. The government's priority is to ensure that regulation is proportionate and promotes innovation, rather than constraining or inhibiting it.

Financial Conduct Authority (FCA)

Project Innovate

2.11 The FCA launched **Project Innovate** in October 2014 to help encourage and support innovation in financial services. This work is central to delivering against the FCA's competition objective – it aims to encourage innovation in the interests of consumers, and promote competition through disruptive innovation that offers new services to customers and challenges existing business models.

2.12 Project Innovate has embedded constructive engagement with innovative firms – from smaller start-ups to mass market new models – and seeks to remove unnecessary barriers to innovation. It helps innovative firms gain access to timely and frank feedback on the regulatory implications of their concepts, plans and choices. It also seeks to tackle the structural issues that impede the progress of innovators entering the market.

2.13 A central part of Project Innovate is the **Innovation Hub** which helps new and established businesses (both regulated and non-regulated) introduce innovative financial products and services to the market. There are no restrictions on the areas of financial services covered by the Innovation Hub: firms innovating in mortgages, capital markets and pensions can all access the Innovation Hub for help in introducing their products to market. The Innovation Hub also performs a horizon-scanning role by identifying new technologies and areas where the regulatory framework needs to adapt to enable further innovation in the interests of consumers.

2.14 It provides an **end-to-end experience for new entrants**. Firms that receive initial support from the Innovation Hub have their applications for authorisation handled via a specialised Project Innovate authorisation process. The FCA provides firms with dedicated supervisory support, usually for one year post-authorisation, which gives firms a seamless regulatory experience and minimises the risk of unnecessary delay. To date, Project Innovate has helped over 300 firms.

The Regulatory Sandbox

2.15 In November 2015 the FCA published its plans to open a **regulatory sandbox**: a safe space where both regulated and unregulated firms can experiment with innovative products, services, business models and delivery mechanisms without immediately incurring all the normal regulatory consequences of engaging in such activity.

2.16 The regulatory sandbox was open for its first round of applications from May to July 2016. The FCA had 69 applications to take part in the sandbox, of which 24 were selected to develop

⁵ EY (2015), Landscaping UK FinTech

their sandbox tests. Given the high demand for this service, the FCA expanded the sandbox team. The FCA has recently closed applications for the second round of the sandbox.

2.17 The FCA also recommended that industry looks into establishing a virtual sandbox, which allows firms to experiment in a virtual environment without entering the real market, using their own or publicly available data, and a sandbox umbrella company. The virtual sandbox could allow collaboration between innovators to develop solutions quicker and in a more informed way. Innovate Finance is leading a working group to explore these recommendations further and is gathering industry views on how this proposal can best be implemented.

2.18 To broaden and strengthen the work of Project Innovate, the FCA is building a programme of activity to engage with incumbent institutions. This is to ensure that incumbent institutions are aware they have access to the services provided by the Innovation Hub and regulatory sandbox. The FCA is also working to establish whether regulatory uncertainty is holding back incumbent firms in the potential development of consumer-friendly innovation.

International Engagement

2.19 The FCA has broadened and strengthened the scope of Project Innovate, to continue to deliver against its competition objective and further support innovative firms. This includes enhanced international engagement.

2.20 As part of this work the FCA has signed a number of Co-operation Agreements with overseas regulators around the world. Co-operation Agreements to date have been signed with the regulatory authorities in Australia, Singapore, Korea, China and Hong Kong. Within these agreements, the FCA:

- facilitates the referral of innovative firms between their respective innovation hubs. This helps put UK-based innovators in touch with the right regulators when they look to start doing business in other regulatory jurisdictions, and stands ready to help non-UK innovators interested in entering the UK market
- shares information about financial services innovations in the UK's respective markets, including emerging trends and regulatory issues

2.21 The FCA works closely with HM Treasury and the Department for International Trade as part of its international engagement. This includes the development of 'FinTech Bridges'. FinTech Bridges are broad, country-level, agreements which incorporate governmental, commercial and regulatory relations. The FCA's Co-operation Agreements constitute the final aspect of a FinTech Bridge.

Other initiatives to support competition and innovation to date

2.22 As well as directly supporting firms through the Innovation Hub and the Regulatory Sandbox, the FCA has introduced broader changes to help innovators. This includes:

- making a statement looking at the extent of the **issue of disproportionate de-risking**, which denies businesses access to banking facilities, and how the FCA might influence firms to take a more proportionate approach
- using **informal steers** on proposed innovations to enable more direct communication with firms
- working with government to create a bespoke regulatory regime for peer-to-peer lending

- working with government to allow peer-to-peer loans and crowdfunded debt securities into the Innovative Finance ISA
- publishing draft guidance in November 2015 to **clarify the requirements on firms when outsourcing to the cloud** and other third-party IT services, following engagement with cloud service providers and regulated firms. The guidance aims to dispel misconceptions about regulators' opposition to the cloud and encourage innovation in this area
- publishing a Call for Input in June 2015 to understand the **barriers to digital and mobile solutions for financial services**, and specific rules and policies that should be introduced to facilitate innovation in this area. In March 2016, the FCA published a feedback statement which set out its roadmap to address the issues raised by market participants
- publishing a Feedback Statement on the call for input on supporting the development and adopters of RegTech (further detail from paragraph 1.69)
- launched the **Advice Unit** to provide regulatory feedback to firms developing automated advice models with the potential to deliver lower cost advice to unserved or underserved consumers, following the Financial Advice Market Review (FAMR). The Advice Unit focuses on models in the investments, protection and pensions sectors

2.23 For most of 2016, the FCA focussed on engaging stakeholders across the Financial Services ecosystem, seeking to encourage innovation and its adoption to increase firms' compliance while reducing the costs. This has seen the FCA develop a reputation as a regulator willing to convene events that help break down unintentional barriers to competition, promote efficient regulation and encourage financial inclusion.

Looking ahead: further measures to support competition and innovation

2.24 Going forward, the FCA is undertaking a wide range of workstreams to further embed innovation and competition within its approach.

- 1 conventional consultation and engagement methods often do not work well for engagement with innovative firms. Since September 2015 the FCA has facilitated a series of **themed weeks**, designed to stimulate intense engagement with stakeholders interested in a particular area of innovation. The first of these events focussed on robo-advice (i.e. automated advice), and the second on innovation in payments. Over the coming months the FCA will also be holding themed weeks on InsurTech and Blockchain. Themed weeks are an effective way of reaching a large number of firms simultaneously – to learn about their problems with the regulatory system, and dispel regulatory uncertainties and myths
- 2 the FCA is working with firms to improve how they communicate with consumers and drive improvements in the effectiveness of the information consumers receive. The **Smarter Consumer Communications initiative** aims to bring about a change in the way information is both communicated and delivered to consumers. The FCA's ambition is to create an environment and regulatory framework where firms' communications encourage and enable informed consumer engagement and decision-making regarding financial products and services. It has already made rules amending its Handbook to remove a number of disclosure documents and

- templates that have not been as effective as initially envisaged in terms of providing appropriate information to consumers⁶
- 3 the FCA is committed to working with industry where an idea has strong potential to improve consumer outcomes; the FCA may consider waiving or modifying disclosure rules where appropriate to facilitate testing of innovative communications
 - 4 working with government to bring **digital currency exchanges into the scope of anti-money laundering regulation**. This will provide a supportive environment for legitimate digital currency users and businesses, and create a hostile environment for illicit users
 - 5 HM Treasury is working with the FCA to implement the **revised Payment Services Directive** (PSD2). PSD2 introduces two new regulated payment services; from early 2018, consumers will have the right to use services which access their account information and initiate payments on their behalves (with consent). This has the potential to facilitate a step-change in the way consumers engage with their banking and payment services, providing new ways for them to manage their accounts, budget and pay for goods. Related to this, the FCA is also engaged with the development of the open banking standard required by the CMA's review into Retail Banking
 - 6 the FCA will work with HM Treasury to assess inhibitors to bringing digital identity to financial services. Those innovative firms which are bringing innovative eID solutions to the market can also access the Innovation Hub

Payment Systems Regulator (PSR)

2.25 The government set up the **Payment Systems Regulator (PSR)**, which became operational in April 2015, with strong objectives to promote innovation and competition in the UK payments sector. In particular, the PSR seeks to ensure that all firms can access payment systems on fair and transparent terms, that governance arrangements are more inclusive and it is clear how, and by whom, decisions are being made.

2.26 Access to payment systems is an important driver of competition and innovation in the provision of payment services. Limited access has long been considered a barrier to entry for new banks, e-money issuers and other payments institutions, with the concern that the pace of innovation in this area is too slow.

2.27 Innovation in payment systems can be driven either competitively, collaboratively, or a combination of the two. The PSR therefore aims to both remove barriers to competitive innovation and ensure that collaborative innovation delivers timely and efficient results for service users.

Competitive innovation

2.28 The PSR's work in this area mostly focuses on **lowering barriers to entry** and ensuring that the market responds effectively to new technologies and business models. The PSR's work aims to give quicker and easier access to payment systems to a wider range of payment service providers, to increase competition and innovation which delivers better outcomes for consumers.

2.29 In particular, the PSR is working to **improve the range of options that are available to PSPs looking to access the payment systems**. This work can involve issuing legally binding directions.

⁶ Policy Statement 16/23- Smarter Consumer Communications: Removing ineffective disclosure requirements in our Handbook

Improving the ability of small and innovative firms to access payment systems means that these firms are able to compete more effectively with large incumbents.

2.30 As part of the work on improving direct and indirect access to payment systems, the PSR also issued general directions to **improve the governance and transparency of payment systems** in the interests of all users and participants. Transparency ensures that payment systems are flexible to the requirements of innovative players. The PSR monitors compliance with these directions to ensure that payment systems' access requirements and governance structures work well for innovative firms. This includes publishing annual reports to assess each scheme's compliance, which includes areas where the PSR expects to see improvements.

2.31 The most recent one was published on the 9 March. It found that there has been a significant improvement in the choice of access options available to payment service providers (PSPs). The payment system operators have been working to make it easier for PSPs to become direct participants in payment systems. As a result, direct participation in the interbank payment systems increased in 2016 with four new direct participants joining – this included the first new participants in Faster Payments since the scheme launched in 2008. The PSR has also identified that there is a strong pipeline of potential new direct participants across the interbank payment systems over the rest of 2017 – with up to 10 new direct participants expected to join the interbank payment systems this year

2.32 To ensure that the market is operating in a way that supports competitive innovation, the PSR recently conducted two market reviews into:

- **the supply of indirect access to payment systems.** This looked at the limited choice of sponsor banks, lack of information and whether competition is working well for service-users. The PSR found that although competition in the supply of indirect access appears to be producing some good outcomes, they identified specific concerns about the quality of access, limited choice for some PSPs, and barriers to switching. The PSR identified a number of developments that, combined with their wider work on access, are likely to address these concerns. Rather than intervening directly, they will focus on encouraging these developments
- **the ownership and competitiveness of central infrastructure provision.** This concluded that competition in the provision of infrastructure services in UK interbank payment systems is not effective. To address this and improve the pace or quality of cost and innovative outcomes, the PSR has proposed two remedies and changes to the ownership of VocalLink. They are consulting on detailed proposals and aim to make a final remedies decision in Spring 2017

2.33 The launch of the PSR and the direct actions it has taken in the course of its regulatory duties have prompted other industry players to start to innovate and take action to support competitiveness. For example, the Faster Payments Scheme (FPS) has been developing its New Access Model which aims to encourage a market-led, competitive supply of services (such as FinTechs offering technical aggregation services).

2.34 Much of the current innovation in payments is occurring in new products and services for consumers, and making available new ways for consumers to pay. PSR's work in opening up access to the existing payments systems, and helping to ensure that future infrastructure facilitates innovation should help further promote innovation in the sector and improve consumer outcomes.

Collaborative innovation

2.35 Innovation should be driven by competition, where possible. However, as payment systems rely on networks built across multiple parties, the PSR recognises that it is often necessary for those parties to collaborate to achieve the best outcomes. There are a number of examples of successful collaborative innovation in payments – for example, Faster Payments and the Current Account Switch Service (CASS).

2.36 Collaborative innovation, however, can be difficult to coordinate and sometimes individual firms have no strong incentive to work collaboratively to improve customer outcomes. To address this, the PSR established the **Payments Strategy Forum** to develop collaborative solutions for improving payment systems. Forum membership includes industry (banks, FinTechs and other providers) and service-user representatives (consumers, retailers, SMEs, corporates and government).

2.37 The draft strategy proposed 14 solutions to meet user needs across three main areas: i) improving trust in payments; ii) simplifying access to promote competition; and iii) a new architecture for payments infrastructure. These solutions included:

- consolidation of the governance of Bacs, Cheque and Credit Clearing and Faster Payment Schemes into a single entity into a New Payment Systems Operator (NPSO)
- development of centralised functions for Know Your Customer and Data Analytics to address Financial Crime issues
- the design and development of New Payments Architecture (NPA) for the UK's three retail inter-bank clearing systems (Bacs; Cheques and Faster Payments). The NPA is defined as the vision for a single set of standards and rules, a thin central infrastructure, end-to-end interoperability (using APIs and a common messaging standard), which would be expected to effectively drive competition and innovation across the value chain. The processing and clearing functions of the simplified framework could be built on distributed architecture or a centralised infrastructure

2.38 This consultation closed on 14 September 2016. 68 responses⁷ were received from a range of stakeholders and assessed as the Forum produced its final strategy. Responses were broadly supportive therefore the proposed 14 solutions were included in the Forum's final strategy⁸ launched on 29 November 2016.

2.39 The PSR has agreed that Forum will continue into 2017, and will be responsible for the detailed design of key elements, including the NPA. The intention is the design of the NPA will be handed over to the NPSO at the end 2017. The NPSO will be responsible for setting and administering the single set of rules, standards, and open-standard APIs for the NPA, and will also procure any central infrastructure that is required.

Prudential Regulation Authority (PRA)

Lowering barriers to entry and expansion

2.40 The PRA supports innovation primarily by ensuring that new banks are able to enter the market, many of which will have innovative and disruptive business models. It also seeks to address the proportionality of regulation for small banks, challenger banks and building societies.

⁷ <https://www.paymentsforum.uk/consultation-reponses>

⁸ <https://www.paymentsforum.uk/final-strategy>

2.41 Together with the FCA, the PRA has reduced barriers to entry that might arise from **capital requirements for new banks**. These now scale up more gradually as the bank becomes established. This means that the minimum amount of capital required by a new entrant bank is substantially lower than before. The PRA and FCA also introduced a **new mobilisation option**, where a firm that has met the essential requirements is granted authorisation, but with restrictions on its activity while other requirements are met. This helps give prospective new banks some certainty while raising capital or investing in infrastructure.

2.42 Twelve new banks have been authorised in this Parliament, several of which have highly innovative business models. For example, Atom Bank (authorised in June 2015) is an app-only bank where customers can only access services via their smartphones, and not through internet or telephone banking. Tandem Bank (authorised in November 2015) is a digital-only retail bank that will operate a personal finance guide which compares financial products offered by both Tandem and its competitors. Other innovative banks which are digitally-focused are Starling and Monzo – both are app-focussed offering only current accounts and overdrafts.

2.43 To further help innovative firms come to market, the PRA and FCA established the **New Bank Start-up Unit** (NBSU) in January 2016 to help prospective new banks enter the market and through the early days of authorisation. Comprising staff from both the PRA and FCA, the NBSU provides new banks with the information and materials they need to navigate the process to become a new bank, as well as a focused supervisory resource during the early years of authorisation. The NBSU has held two seminars to provide information to applicants and new banks: both were heavily oversubscribed.

Other initiatives to support new and innovative firms

2.44 More broadly, the PRA and the wider Bank of England are also engaging in a number of workstreams to support new and innovative firms. Last year the PRA introduced new prudential rules for **credit unions** that have modernised the prudential framework.

2.45 The Bank of England and PRA are exploring potential opportunities to take a more proportionate approach to the application of pan-European rules, in particular for smaller firms. This includes discussing these issues with EU policymakers, including the European Commission, and considering the transition process for smaller banks and building societies to begin to use a model-based internal ratings based approach to credit risk.

Bank of England

2.46 The Bank of England supports innovation in financial services through its work to promote research and data analytics in central banking, and improving the ability of innovative firms to access Bank of England facilities. The Bank is upgrading its payment infrastructure, researching new payment technology, and is working to harness the opportunities offered by developments in financial technology (FinTech). The Bank has also embraced new technology in the provision of banknotes.

Research and analytics

2.47 The Bank launched its **One Bank Research Agenda** initiative in February 2015 to try to understand and develop innovative best practice in central banking, taking into account technological, institutional, social and environmental change. It aims to facilitate open dialogue between the Bank and the research community to support innovation and inform the Bank's work. The Bank has set up a Research Hub to help drive this forward, and has developed a new online blog, Bank Underground.

2.48 The initiative covers research questions on five broad themes: policy frameworks and interactions; evaluating regulation, resolution and market structures; policy operationalisation and implementation; new data, methodologies and approaches; and response to fundamental change. In particular, the fundamental change workstream takes a longer-term look at how technological (and other) innovations might affect central banking over a longer horizon. This includes, for example, exploring the impact of driverless vehicles and alternative finance providers, and any associated economic, technological and regulatory challenges arising from these developments. In 2016, the Bank published research (working papers) on digital currencies and climate change.

2.49 As part of its broader research agenda, the Bank publishes **new datasets to facilitate external research**. This includes long-run historical data, the Bank of England's balance sheet, and data recorded by the Bank's regional agents. The long-term plan is to open up even more of the Bank's data to the public.

2.50 The Bank has also set up an **Advanced Analytics division and data lab** to exploit new and innovative analytical tools and techniques, analyse new data sources such as social media, and help spread best practice in the analysis of new big datasets both inside and outside the Bank. The division is also developing relationships with external partners in this area, and in 2015 ran a data visualisation competition to engage with data scientists and students across the UK.

2.51 In the payments space, the Bank is conducting **research into innovations in payments technology**, with a particular focus on digital currencies and the distributed ledger systems that underpin them. This builds on the Quarterly Bulletin articles published by the Bank in 2014, which considered the technical architecture of digital currencies, and the economic theories that govern how they work. In July 2016, the Bank published a series of research questions on the impact of a digital currency on monetary and financial stability and whether new technology had the potential to be used to provide wider access to central bank money, via a Central Bank Digital Currency. The Bank is seeking contributions from a wide range of perspectives and disciplines to feed into its long-term research.

Polymer banknotes

2.52 Following extensive public consultation, the Bank announced in December 2013 its intention to print **new Bank of England banknotes on polymer**. Polymer is a thin and flexible plastic material which has benefits over and above current paper banknotes. Polymer notes are cleaner and more durable – they are more resistant to dirt and moisture, more environmentally friendly and last at least 2.5 times longer than paper banknotes. Polymer notes are also more secure, with advanced security features that provide a step-change in counterfeit resilience. The new £5 note, featuring Sir Winston Churchill, entered circulation on 13 September 2016. The new £10 note is due to be introduced in summer 2017, with the £20 note following by 2020.

Access to Bank of England facilities

2.53 The Bank's **reform of its Sterling Monetary Framework (SMF)** has made it easier for small banks, challenger banks and building societies to access the Bank of England's balance sheet at a lower cost and with greater predictability. 51 banks and building societies have been given access since the changes were introduced in January 2014.

2.54 The Bank has **broadened the range of collateral accepted in its market operations** to now include residential mortgages, asset finance, personal loans, auto loans, corporate loans, SME loans and revolving credit facilities. This allows access for a wider range of counterparties – 90 banks and building societies now have assets placed at the Bank, ready for use in initiatives such as the Indexed Long-Term Repo, the Term Funding Scheme, and the Funding for Lending Scheme.

2.55 As part of its strategy to broaden liquidity provision in the market, since 2015 the Bank has been working to **assess the feasibility of establishing a Shari'ah compliant liquidity facility**. A public consultation detailing potentially feasible models closed in April 2016, and the Bank has since been conducting further analysis on the operational, financial, risk management and legal implications of each model. The Bank recognises the challenges Islamic banks face in meeting liquidity requirements with the current limited range of options – existing facilities are not Shari'ah compliant as they involve interest-bearing activity. In late 2015, the Bank became an associate member of the Islamic Financial Services Board.

Payments technology

2.56 In its provision of payment services, the Bank has introduced prefunding for Bacs and Faster Payments, which **lowers barriers to entry** for banks and building societies looking to become members of these payment schemes. Previously, a member of these schemes had to hold securities as collateral and commit to a mutual loss-sharing framework. Prefunding allows each institution to manage their exposure limit using reserves at the Bank.

2.57 In January 2016 the Bank announced its plan to design a **blueprint for the future of the UK's high value sterling settlement system** – the Real Time Gross Settlement System (RTGS). This was followed by the Governor's announcement in June that the Bank intends to extend access to RTGS to a range of non-bank payment service providers to compete on a level playing field with banks. A public consultation on RTGS was launched in September 2016 setting out proposals for an enhanced RTGS system with greater access, resilience, interoperability and additional functionality. The consultation closed in November 2016. All responses received will be used to help shape the Bank's decisions on the final high-level blueprint for the future RTGS service, which will be published in early 2017 alongside a summary of responses received.

2.58 This diversification of the number of settlement firms should help drive greater innovation in risk-reducing payments technologies, expanding access should have financial stability benefits and enable more effective, efficient and inclusive payments. The Bank will look to redesign RTGS in such a way that it is capable of responding to the changing structure of the financial system, recognising that payment system users want simpler and more resilient pathways for their payments. The new service will be capable of interfacing with a range of new technologies being used in the private sector while remaining highly resilient to the increasingly diverse range of threats to continuity of service and having the capacity to support the future evolution of regulatory and monetary policy tools.

FinTech

2.59 In June 2016, the Bank launched its own **FinTech Accelerator** to partner with new technology firms to help it harness FinTech innovations for central banking applications. Since its launch, the Bank has worked with 9 firms on 8 proofs of concept (PoCs), including on data desensitisation, and cyber security. By running proofs of concept, the Bank is able to explore the benefits new technology can bring, whilst mitigating some of the associated risks. Often, the Accelerator partners with firms that are early in their development life-cycle. The PoC model benefits these firms by providing the valuable first client reference, together with invaluable feedback which can help shape their products and solutions. In Spring 2017, the Accelerator will announce the next set of firms that it will be working with.

2.60 More broadly, the Bank is **calibrating its approach to FinTech developments** and understanding the wider policy implications by engaging with firms, monitoring what these developments could mean for the financial system, with a view to taking proportionate action if and when appropriate. Since its launch, the Accelerator team has met or researched over 150

start-ups, participated in around 25 conferences, and held round-tables with more than 80 organisations.

The role of HM Treasury

2.61 HM Treasury works with the Financial Conduct Authority, Bank of England and the Payment Systems Regulator, to support greater competition in financial services.

2.62 As part of this work, the Treasury helps co-ordinate the legislative and non-legislative financial services agenda with UK, European and International bodies including: the Competition and Markets Authority and British Standards Institute domestically; the European Banking Authority, European Parliament and European Commission within the EU; alongside other governments and regulators.

2.63 Internationally, this is evidenced by FinTech Bridges, which were first launched in May 2016 and represent a new approach to boosting governmental, regulatory and trade and investment co-operation across national boundaries and involves collaboration between HM Treasury, the Department for International Trade and the regulators.

2.64 This is in addition to the cross-government collaboration, undertaken with the Department for Culture, Media and Sport (DCMS) and the Department for Business, Energy and Industrial Strategy (BEIS), which looks to support the wider Tech ecosystem on which many FinTechs rely.

2.65 To further boost the collaborative environment between FinTechs, the government, the regulators and larger financial services firms, the government is launching a FinTech delivery panel, designed to accelerate the progress of key initiatives that will help to drive forward innovation in the financial services sector. This forum will represent a key opportunity for government and the regulators to work with the sector and understand their views holistically across financial services in a transparent manner.

2.66 Through numerous measures, the Treasury is helping to reduce barriers to entry, both domestically and internationally – opening up markets and boosting trade and investment.

How financial services regulators are supporting “RegTech”

2.67 Regulators not only have a role to play in promoting competition and innovation, but also in using technological advances to reduce regulatory burdens on firms and drive efficiency savings. The FCA and PRA have been particularly focused on this issue.

2.68 Firms have to meet higher regulatory standards and greater reporting requirements following the financial crisis. New technologies that help firms better manage these regulatory requirements and reduce compliance costs (so-called **RegTech**) help promote effective competition and innovation.

2.69 The government announced at Budget 2015 that the FCA, working with the PRA, will identify ways to support the adoption of RegTech. Since then, the FCA has engaged extensively with interested parties from across the ecosystem:

7 in November 2015 the FCA launched a RegTech Call for Input on supporting the development and adoption of RegTech. This received over 350 responses from industry, including more than 100 written responses. A number of roundtables were convened in Q1 2016, at which the FCA sought broader stakeholder views on how to progress this work

- 8 the FCA issued the findings in July 2016 in a document that sets out the main themes and its intended approach going forward. It has been extensively quoted and referenced globally by parties interested in RegTech
- 9 in April the FCA convened a two day technology ideation event called a TechSprint (a variation on the events commonly known in the industry as hackathons). This was a collaborative event focused on the challenge of using new technological capabilities to provide digital access to the financially excluded. The intention was to encourage Financial Services firms to open up and provide better services to under-served consumer groups. It was also an opportunity for the FCA to test the market's response to this new kind of proactive intervention. It had a very positive response and is something the FCA will continue to use for appropriate topics going forward
- 10 following on from this on the 9th and 10th of November the FCA convened a much larger event focused on 'Unlocking Regulatory Reporting'. The FCA brought together existing and challenger banks, large technology and new FinTech firms, and academics to discuss and seek to address the cost, efficiency and effectiveness of regulatory reporting to both the FCA and the BoE
- 11 the FCA has a strong interest in Financial Inclusion. Following on from our April 2016 TechSprint, the FCA is organising a TechSprint in association with the Money and Mental Health Policy Institute to be held in March 2017. The objective is to demonstrate to financial services firms the possibilities new technologies can offer, and to encourage them to innovate and adopt solutions that help address the challenges faced by consumers with mental health issues

2.70 The FCA intend to continue to pro-actively engage with the FinTech / RegTech community in promoting the development and adoption of RegTech. Equally, the FCA has a desire to explore RegTech solutions that it could apply itself to improve its own efficiency and effectiveness. This includes adopting innovative practices based on learnings from stakeholders across the financial services ecosystem.

2.71 Through all of these actions, the FCA is seeking to improve compliance and reduce the cost of regulation for both firms and itself as the regulator. RegTech firms will also have the benefit of access to the Innovation Hub, Regulatory Sandbox and international cooperation agreements to support them during the authorisation process and help them to expand overseas.

List of institutional A respondents

Association of British Credit Unions

Association of British Insurers

Altus

Aviva

Barclays

BBA

BGL Group

British Insurance Brokers' Association

Building Societies Association

Capital One

CME Group

CoinFloor

Consumer Finance Association

Co-ops UK

CrowdCube

Epiphyte

EY

Faster Payments

Finpoint

GLI Finance

Innovate Finance

JWG

Keep me posted

Lloyds Banking Group

Markit

MasterCard

Misys

Nutmeg

Origo
PA Consulting Group
Payments UK
Paysafe Group
PinSENT Masons
TechUK
TISA
TransferWise
UK Crowdfunding Association
Virgin Money
Vocalink

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