New Payment System Operator

Payment System Operator Delivery Group Report

Final Report: 4th May 2017

Foreword from the Chair

The United Kingdom's retail payments systems are critically important, providing retail payment and receipt services that are relied upon by the government, financial institutions, businesses (large and small), charities and the general public every single day. As financial, economic and technological changes occur, these drive users' needs and expectations of what the retail payment systems might provide, so requiring a continuous cycle of evolution in the provision of such services. This cycle of evolution has been turning already for a number of years, with an increasing pace of change. Our current retail Payment System Operators (PSOs) have been part of that evolution, enabling change to happen, and ensuring that the UK benefits from what are (and need to continue to be) world-class, and world-leading payment systems. Being world-class is not just a technological aspiration; it also includes the openness and inclusivity of payments as part of an open and competitive banking industry, including new models of payment system access, and where managed services such as the Current Account Switching Service (CASS) play an important part.

Retail payment systems do not exist in isolation; they are part of a broad and complex payments ecosystem. The work of the Payments Strategy Forum (PSF), leading up to the production of its final report in November 2016, has brought forward an organised, connected and wide-reaching strategy for the UK retail payments industry, of which the consolidation of the PSOs is an important component. The broad consensus of approval of, and support for, the strategic initiatives outlined in the PSF Final Report led the two relevant regulators (Bank of England and the Payments Systems Regulator) to jointly commission the Payment System Operator Delivery Group (PSO DG).

This PSO DG, under my independent chairmanship, was tasked with developing and producing this report, with its recommendations as to the structure of a future consolidated retail payment system operator (NPSO), as well as the implementation steps required to move forward to its achievement. The PSO DG contained representation from across the UK payments industry, including the Independent Chairs of each of the three Retail PSOs and respected industry representatives of large banks, medium and smaller Participants and the users of the payments industry. I am pleased to present this report as the culmination of the PSO DG's work.

In its recommendations for the creation of the NPSO, the PSO DG has sought to move away from the current membership model towards a more transparent relationship between the NPSO and its customers in all forms, as well as constructing an entity which can manage evolving systemic risk. We have endeavoured to strike a balance between our responsibility to offer up a design for the new NPSO and the need to recognise that it will be for the new board of the NPSO to determine the detail of its future course and strategy. In this document we have outlined a recommended strategic framework for the consolidated NPSO, which will enable the pursuit of two closely interwoven strands: the pursuit of continued, and increasing, resilience for the retail payments infrastructure; and the enablement of increased competition in both upstream (payment platforms) and downstream (payment service provision) parts of the payments ecosystem.

As is usually the case with a report of this type, the work involved in sifting through different options, opinions and perspectives belies the relatively straightforward set of recommendations that are set out here. They represent a staging point in a process of continuing change, which will be enabled through the continued collaboration and support of all Participants and users in the three retail payment systems. So this is not an end point; more a launching point for the future of retail payment services for the United Kingdom, where all stakeholders' interests are encompassed and involved. The work involved in implementing the recommendations in this report will not be for "others" to undertake. It will need to be undertaken with contributions and support from everyone – where it will be a collective "we" achievement, not something done by "you" or "they".

I would like to thank everyone who has been involved in the development and production of this report. In particular, my colleagues on the Delivery Group, Jane Bevis, Nick Caplan, Becky Clements, Faith Reynolds, David Rigney and Russell Saunders, as well as the observers from the Bank of England and the PSR. I also thank the senior leadership teams within the three retail PSOs for their contributions in meetings, especially with regard to values, and thank them and all the staff who have continued to work tirelessly and conscientiously despite the uncertainties suggested by the NPSO project. I would also like to thank the support team who have provided the essential work of report drafting, minute writing and the publication of our meeting summaries on our page on the PSR website. This work has involved considerable effort and time, beyond everyone's day jobs. I am very grateful for the commitment shown by everyone involved.

Robert Stansbury

Independent Chairman

PSO Delivery Group

04.05.17

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Executive Summary

The Payment System Operator Delivery Group (PSO DG) was set up by the Bank of England and the Payment Systems Regulator (PSR) as a response to the Payments Strategy Forum's (PSF) proposed consolidation of the three retail Payment System Operators (PSOs); Bacs Payment Schemes Limited (Bacs), Cheque and Credit Clearing Company Limited (C&CCC) and Faster Payments Scheme Limited (FPS). This report outlines the recommendations of the PSO DG pertaining to the design and subsequent set-up of the New Payment Systems Operator (NPSO).

First, the PSO DG sets out a Strategic Framework including company purpose and strategic objectives in Section 2 of this document. This provides recommendations on what the PSO DG believes the NPSO should have as its purpose; '*to support a vibrant UK economy enabling a globally competitive payments industry through the provision of robust, resilient, collaborative retail payments services, rules and standards for the benefit, and meeting the evolving needs, of all users'* and a set of six objectives which will allow the new entity to fulfil this purpose. In so doing, it will be enabled to realise the benefits from consolidation outlined in previous work, including those in the PSO Governance Subgroup Report from June 2016 and the PSF strategy published in November 2016. Section 2 also includes some initial work that has also been done in order to make suggestions to the NPSO Board as to what the culture, principles and values of the NPSO may be.

The PSO DG then moved on to consider the optimal design for the NPSO, including company and Board structure, wider corporate governance, funding model and finally operating model. The PSO DG envisages the NPSO being set up as a company limited by guarantee, which will absorb the existing schemes over time. The rationale for this is detailed in sections 3.1 and 3.2. In addition, it believes that the Board structure should be more independent than the existing structures, to avoid conflicts of interest for individual Directors. The composition and principles to achieve this are outlined in section 3.3. Expanding on these principles, the PSO DG recommends the inclusion of wider corporate governance, so that the Board will be held to account by the Guarantors, as well as hear the voice of the wider stakeholder community through two advisory councils: an End-User council; and a Participant council. The benefits of this approach are described in section 3.5.

The PSO DG has identified distinct purposes for which it anticipates funding needs will arise: initial funding requirements; ongoing operations of the NPSO; new or expanded functions; and the potential need for extraordinary funding. This report includes recommendations on how to cover the cost of set up of the NPSO, as well as how to establish a funding model that allows the new entity to have independent control over the use of its funds and adequately cover its capital needs, while decreasing the reliance and likelihood of calling on Participants. Further detail is provided in section 3.6 and appendix 7.3.

The PSO DG analysed the current functional models of the existing organisations, and how best to maintain continuity of service during the consolidation process. The PSO DG recommends a three-stage process in which the NPSO will be created as a holding company at Stage One, and will have one subsidiary company for each scheme. In the case of Bacs and FPS, their structures will remain the same and their existing contracts will be maintained, but they will both be part of the NPSO Hold Co. In the case of C&CCC, it is likely that only a new company for the Image Clearing System (ICS) will be a part of the NPSO since the paper clearing will cease operation in 2018. An interim Board would need to be set up for the NPSO. Progressing to Stage Two will require that functions, such as strategy, human resources and finance, may start to become centralised and single frameworks (e.g. risk management) for the NPSO will begin to be developed at this stage. Finally, during Stage Three, subsequent integration and consolidation will be achieved, but the PSO

DG believes the detailed design of this falls outside of its own remit and will be the responsibility of the future Board of the NPSO. This process and the PSO DG's view is further developed in section 3.7.

The benefits for different groups of stakeholders that should be achieved from the consolidation, as proposed in this document, are detailed in section 4. Throughout this document, we have categorised the stakeholders into three groups: service enablers; service users (including End-Users and Participants); and policy setters and trade associations.

Throughout the report the PSO DG refers to:

- **Participants:** An entity that has a payments service relationship with the NPSO. It can include settlement Participants, direct Participants, indirect Participants, service Participants, third party providers, aggregators, and technology platform providers.
- **Service users:** An individual or entity who uses directly or indirectly the services provided by the NPSO. This includes End-Users and Participants.
- **Members:** The companies act 2006 states that any person who agrees to become a Member of a company, and whose name is entered in its register of members, is a Member of the company.
- **Guarantors**: A Guarantor is a Member.

The PSO DG has also considered and made recommendations on an implementation plan, including high level activities and a target timeline. Some critical activities have already commenced. The necessary conditions so that the recommendations herein can be carried out begin with securing agreement from the Co-ordination Group (i.e. the Bank of England and the PSR), the Boards of the existing schemes and the members of each scheme.

Commitment from the institutions who make up the current PSO membership group to provide the initial funding will also be needed. The PSO DG provides a "best guess" of the funding that will be required to get the NPSO up and running and the timetable over which this funding will be needed in appendix 7.3. This outlines costs which have already been committed, project delivery costs, NPSO run costs for year one and the topic of NPSO reserves. The lower estimate of the costs which have not already been committed is £6.8 million and the higher estimate is £8.8 million (these figures do not include the full amount of additional reserves that may be required for ICS, Bacs, FPS and the NPSO Hold Co as these amounts and/or the mechanisms for moving them into the NPSO remains to be established).

The PSO DG has identified risks to the project which could put existing services at risk as well as delay the consolidation process, and has proposed mitigating actions in section 6. It is important to highlight that some of these events lie beyond the control of the parties involved in the consolidation, for example, the necessary approval by the CMA. Target dates set out are therefore an aspiration for the time it will take the consolidation to be complete. It will be for the Board of the NPSO to control the timetable so that the risks of either a too rapid or a too slow implementation are mitigated to the best extent possible.

Glossary

Affiliate	An organisation which is part of either the Electronic Payments Affiliates Interest Group or the CHAPS Service User Group (industry interest groups)
Aggregator	An organisation that provides one or more PSPs with technical access to one or more payment systems
API	Application programming interface
Automated Teller Machine (ATM)	A device that enables customers to withdraw cash from their accounts and/or access other services
Bacs	Frequently used as shorthand for either BPSL and/or the Bacs schemes i.e. Direct Debit and Bacs Direct Credit
Bacs Approved Bureau	An organisation that sends payments to Bacs on behalf of another organisation
Bacs Direct Credit	The Bacs scheme by which an organisation makes payments in bulk to individual bank accounts e.g. paying salaries
Bacs Payment Schemes Limited (BPSL)	The PSO that operates the Bacs schemes and other Bacs services (CASS, Cash ISA Transfer Service, BPRS)
BBCC	Belfast Bankers' Clearing Company, who operate the cheque clearing in Northern Ireland
Board Director (or Director)	A Member of a Board of Directors (elected or appointed)
BoE	Bank of England
Bulk Payment Redirection Service (BPRS)	A service that automatically redirects certain payment types (e.g. Bacs and Faster Payments), and that is primarily used to support the transfer of (typically large volumes of) accounts between PSPs
C&CCC (Cheque & Credit Clearing Company)	The PSO that operates the cheque and credit clearing scheme (excluding for Northern Ireland which is operated by BBCC)
Cash ISA Transfer Service	A service that enables customers to transfer cash ISAs between participating providers
CHAPS	The scheme typically used for high value payments which are settled in real-time
CHAPS Co	The PSO that operates the CHAPS scheme
Cheque	A paper instruction to transfer funds from the payer to the payee
Clearing	The processing of a payment between two PSPs
CMA	Competition and Markets Authority, who work to promote competition for the benefit of consumers, both within and outside the UK. The CMA is a non-ministerial department of the UK government
Current Account Switch Service (CASS)	A free to use service that lets consumers and small businesses switch their current account from one participating bank or building society to another. It has been designed to be simple, reliable and stress-free and is backed by the Current Account Switch Guarantee
Delivery Group	The PSO Delivery Group jointly commissioned by the PSR and the BoE and tasked to make recommendations on the consolidation on three retail PSOs into one consolidated entity and to produce this report
Direct Debit	The Bacs scheme by which an organisation collects pre-notified payments in bulk from individual payers' bank accounts e.g. utility bills
End-User	All those who initiate or receive payments including individual consumers, small businesses, charities, corporations, NGOs and government departments
Faster Payments	The scheme used for real-time payments, including Standing Orders, and also supports Paym

Faster Payments Scheme Ltd (FPSL)	The PSO that operates Faster Payments
Guarantor	A Guarantor is a Member.
Image Clearing System (ICS)	The payment system which will support the processing and clearing of cheques and credits by image
ICS Co.	Image Clearing System Company
Infrastructure Provider	A company providing the systemic infrastructure for exchanging information and instructions about payments, used by the PSOs
ISO 20022	An international standard for the development of financial messages which ICS will be the first UK payment scheme to adopt
ISO 8583	An international standard used for ATM, credit and debit card and Faster Payments messaging
LINK	The UK's largest ATM scheme that enables customers to use ATMs and also supports Paym
Link Scheme Ltd	The PSO that operates the LINK scheme
JML	Joint Money Laundering
JMLIT	Joint Money Laundering Intelligence Taskforce
Member	The Companies Act 2006 states that any legal person who agrees to become a Member of the company, and whose name is entered in its register of members, is a Member of the company
MPSCo (Mobile Payments Service	The company that operates the Paym service
NPA	New Payments Architecture as defined by the Payments Strategy Forum
Participant	A Participant is an entity that has a payments service relationship with the NPSO. It can include settlement Participants, direct Participants, indirect Participants, service Participants, third party providers and aggregators
Participant Agreement	The contract between the Participant and the scheme/service operating company
Payee	Person or business credited by a payment (receiving a payment)
Payer	Person or business debited by a payment (making a payment)
Paym	A service that enables payments to be made using a proxy, such as a mobile phone number, to make a payment via Faster Payments or LINK to a bank account
Payments Strategy Forum (PSF)	The Payments Strategy Forum (the Forum) was announced by the Payment Systems Regulator (PSR) in its Policy Statement published in March 2015. The Forum leads on a process to identify, prioritise and help to deliver initiatives where it is necessary for the payments industry to work together to promote collaborative innovation. The central focus of the Forum is to make payment systems work better for those that use them.
Payment System Operator (PSO)	A company that operates one or more schemes. All PSOs are regulated by the PSR and additionally certain PSOs are supervised by the Bank of England
PSO DG	The PSO Delivery Group jointly commissioned by the PSR and the BoE and tasked to make recommendations on the consolidation on three retail PSOs into one consolidated entity and to produce this report
Payment Service Provider (PSP)	An organisation that provides payment services to their customers typically including making payments and enabling money to be paid into and withdrawn from an account
Payment Systems Regulator (PSR)	The competition-focused, economic regulator of the payments industry established under the Financial Services (Banking Reform) Act 2013

PFMI	Principles for Financial Market Infrastructures published by CPMI IOSCO
Pre-Funding	Funds held in reserves account at the Bank of England to cover the maximum debit position for each Participant in a scheme
Rules of Membership	Those rules set out which define how the company operates. These can include; payment of fees, provision of guarantees, voting rights, code of conduct, withdrawal from membership (rights and obligations of membership).
Real-Time Gross Settlement (RTGS)	The real-time settlement of payments on an individual basis i.e. without netting. RTGS is also the name of the Bank of England's RTGS system.
Scheme	A set of rules and technical standards for making payments. The PSOs define and manage these rules.
Service user	An individual or entity who uses directly or indirectly the services provided by the NPSO. This includes End-Users and Participants.
Settlement	The movement of money across Bank of England Settlement Accounts to resolve obligations between scheme Participants
Settlement Account	An account at the Bank of England used in payment processing to facilitate settlement
Settlement Participant	A Participant with a settlement account at the Bank of England
Shareholder	An owner of shares in a company.
Sponsorship	The arrangement by which a scheme or service Participant authorises other organisations to use a scheme or service. Sponsorship may also include accepting responsibility for payments of sponsored organisations.
Stage One	The first stage of the implementation approach for the NPSO as set out in this report
Stage Two	The second stage of the implementation approach for the NPSO as set out in this report
Stage Three	The third stage of the implementation approach for the NPSO as set out in this report
Standard 18	The Bacs standard file/record format used by the Direct Debit and Bacs Direct Credit schemes
Standing Order	An instruction from a payer to their PSP to pay a set amount at regular intervals to the payee's account. The majority of Standing Orders are processed by Faster Payments.
Society for Worldwide Interbank Financial Telecommunication (SWIFT)	The organisation that operates an international network which facilitates the exchange of payment and other financial messages
Third Sector	The part of an economy or society comprising of non-governmental and non-profit-making organisations or associations, including charities, voluntary and community groups.
TOM	Target Operating Model
TPA	Technology Providers / Aggregators
UKFFA	UK Financial Fraud Action
UKPA	UK Payments Administration Ltd.

1. Introduction

Payment systems in the UK are today among the most advanced in the world, recognised for their resilience and reliability, and the value they provide to all End-Users. Our payment systems enable payments to be made with ease across a choice of real-time electronic transfers, cheques, account-based payments and cards. This is testament to the UK's status as a leading payments ecosystem which in recent years has been reinforced with the introduction of the Current Account Switching Service (CASS) and Paym mobile payments, as well as the planned introduction of image clearing for cheques due to go live in October. To meet the constantly developing needs of businesses and consumers, our payment systems must evolve ever more quickly. This means bridging the gap between these 'End-User' needs and our infrastructure's ability to provide simpler access, enhanced adaptability and security through faster paced innovation. These questions were examined by the Payments Strategy Forum (PSF), i.e. how to close the needs gap, address the detriments, and unlock competition and innovation in payments.

In November 2016, the PSF published their strategy "*A Payments Strategy for the 21st Century – Putting the needs of users first*", which outlined solutions addressing the need to:

- Respond to End-User needs.
- Improve trust in payments.
- Simplify access to promote competition.
- Build a new architecture for payments.

As part of the solution to "simplify access to promote competition" the PSF proposed the consolidation of the three main UK retail Payment System Operators (PSOs); Bacs Payment Schemes Limited (Bacs), Cheque and Credit Clearing Company Limited (C&CCC) and Faster Payments Schemes Limited (FPS). The drivers behind this as identified by the payments community were that multiple payment systems are unnecessarily complex, time consuming and costly for Payments Service Providers (PSPs) to join and participate in, thereby affecting End-Users and stifling competition. The consolidation of the three PSOs should also act as a substantial enabler for more speedy migration to the PSF's proposed New Payments Architecture (NPA).

As a response to this, the Bank of England and the PSR established the PSO DG, to opine on design and provide recommendations for consolidating the three existing schemes into the NPSO. The PSO DG's mandate is to make recommendations on key characteristics of the new entity and produce a project plan for consolidation. Within these recommendations, the PSO DG would look to satisfy End-User needs including individuals i.e. consumers, businesses, the Third Sector and government, all of which form a part of a wider payment ecosystem that will benefit from the creation of the NPSO. This also presents the PSO DG with the opportunity to create an operator that can bring together and enhance the most effective elements of the existing PSOs to work together in a more integrated way, and with a clear mandate to provide an optimal payment experience for all End-Users and Participants in the UK, for the good of society and the economy as a whole.

In this section of the report, further background is provided regarding the NPSO and the reasons why the PSO DG was established by the Bank of England and the PSR. The history of the main UK retail PSOs is highlighted and discussion of their current state and the origin of the proposal to consolidate them into a single entity is provided. The role the NPSO will have in realising the UK payments strategy proposed by the PSF has also been set out.

Finally, there is evaluation of where collaboration will be needed between the NPSO and other industry stakeholders globally and within the UK to deliver fundamental changes to the payments industry, including the suite of solutions proposed by the PSF. It is important to understand that the creation of the NPSO is just one of a set of solutions proposed by the PSF, and that collaboration and alignment across the industry is necessary for the maximum potential to be realised most efficiently. This will involve communication and working together beyond the set-up of the NPSO and will involve working with a variety of stakeholders over the short and long-term to understand better how the NPSO can deliver the purpose the PSO DG have concluded it should fulfil; to support a vibrant UK economy by enabling globally competitive payments industry through the provision of robust, resilient, collaborative retail payments for the benefit of all users.

1.1 History of the PSOs

Before considering the current state of the PSOs (namely Bacs, FPS and C&CCC) and the origins of the proposal to consolidate them into a single entity, it is important to understand their history. These PSOs represent three of the different interbank payment systems in the UK which also include LINK and CHAPS. Bacs, C&CCC and FPS focus on retail payments (i.e. payments between consumers, businesses and government as opposed to wholesale payments between PSPs on their own account) and the schemes provide important functionality for the payments community. They enable different stakeholders in the UK economy to make payments which were defined by the PSF as:

“The transfer of monetary value between End-Users e.g. people, businesses and government. The systems that let us send and receive these payments have evolved to include a variety of different payment methods, from cash to Direct Debit and cards to electronic transfers between individuals.”

The schemes have a vital societal value, as they enable everyday activities, and impact the way our economy works. Each of these retail schemes is critical to the smooth operation of the UK economy and payments ecosystem. Bacs has been in existence since 1968 and currently processes more than four billion Direct Debits a year, as well as a billion benefit payments and the majority of UK salaries. C&CCC was founded in 1985 to co-ordinate more centrally a 300 year old payment instrument, and is still relied upon by 2 million users each day who prefer to use cheques. The Belfast Bankers’ Clearing Company (BBCC) is C&CCC’s equivalent in Northern Ireland and it is expected that the two schemes will merge to form the UK-wide digital clearing services, ICS, in 2017. The Faster Payments service was launched in 2008 by CHAPS Co. As an independent PSO, FPS is the newest of these organisations, it enables real-time transfer of payments as well as the bulk of the UK’s Standing Orders. Each of these systems is regulated by the PSR, which describes them as follows:

*“**Bacs** is the interbank system that processes payments through two principal electronic payment schemes: Direct Debit, which is used by individuals to pay bills, and Bacs Direct Credits, which are used by businesses to pay employee salaries and wages. Bacs Payment Schemes Ltd (BPSL) operates the Bacs payment system.*

***C&CC (Cheque & Credit)** is the interbank payment system in England, Scotland and Wales that processes cheques and other paper instruments. C&CCCL (Cheque and Credit Clearing Company Ltd) operates the C&C payment system.*

***FPS (Faster Payments Service)** provides near real-time payments as well as standing orders. Almost all internet and telephone banking payments in the UK are now processed via FPS. It is also used by PSPs to process other services. Faster Payments Scheme Ltd (FPSL) operates the FPS payment system.”*

In addition, Bacs and FPS have been recognised as being systemically important financial markets infrastructures and designated by HM Treasury for statutory oversight by the Bank of England. Without doubt, this will also be the case for the NPSO. A summary of the responsibilities with respect to the NPSO as a systemic risk operator, assuming it takes up the functionality set out in this report, is available in appendix 7.4.

The schemes underwent a critical change in 2013, when under the instructions of the Bank of England, Bacs and FPS were required to replace their Member appointed board chairs with independent chairs, and start to balance the previously entirely Member appointed boards with one or more independent non-executive directors with a public interest mandate and decision making veto. C&CCC made the same changes voluntarily in 2013. These substantial governance changes initiated the transformational journeys the schemes have been travelling on for the last few years.

A brief look at how the three retail PSOs have evolved helps to explain why they were created as three separate entities. Figure 1 shows significant milestones in their history, and helps illustrate their evolution over time and recent innovations delivered.

During the 1990s cheque volumes peaked as 2.5 billion cheques were cleared. Since then, cheque use generally has been in decline although it is still highly valued by digitally and financially excluded customers. During the following decade, FPS was created and Bacs introduced important innovations such as the paperless service. This led to rapid growth for both of them, with Bacs becoming the largest processor of transactions by volume, having processed 6.22 billion transactions in 2016. Similarly, FPS grew from 82 million transactions in the year of its launch to 1.4 billion per year in less than ten years.

Figure 1. **History of the PSOs by decade**

	bacs	Cheque & Credit Clearing Company	Faster Payments
1980s	**1986:** Bankers Automated Clearing Services renamed Bacs limited	**1985:** Company was established with 10 members which would become the shareholders	
1990s	**1990:** Automated Direct Debit Instruction Service introduced Direct Debit guarantee introduced	**1990:** Cheque volumes peaked as 2.5bn cheques were cleared **1996:** Inter Bank Data Exchange – first electronic network for exchange of bulk clearing data	
2000s	**2001:** Introduction of ToDDaSO service to make switching bank accounts easier **2003:** Scheme separated from infrastructure **2006:** Danske Bank first non-UK Member bank **2009:** Paperless service introduced Bacs CSR charter introduced	**2002:** C&CCC became independent taking control of its admissions process and publishing its eligibility criteria **2008:** Payments Council set a target date to close the central cheque processing system in 2018	**2008:** FPS launched – 1st new payment system to be introduced in the UK for over 20 years Standing Orders start to be processed via Faster Payments **2009:** Millionth payment processed Direct Corporate Access service introduced
2010s	**2011:** Citibank first non-Euro Member bank **2012:** Cash ISA service launched Value of Direct Debit payments by consumers exceeds cash payments Value of Bacs' annual transactions reaches £4.15 trillion Bacs becomes carbon neutral **2013:** HMRC RTI reporting goes live Launch of Current Account Switch Service Bacs appoints independent chairman of the board Bacs launches Centralised Biller Update Service and ISCD **2014:** Bacs takes over Current Account Switch Service management **2015:** DVLA offers option to pay by Direct Debit Bulk Payment Redirection Service launches, enabling the transfer of large numbers of accounts between banking providers **2016**: Record breaking 6.22billion transactions processed in the year 109 million transactions processed in a single day Bacs launches central sort code website, improving access to sort codes for PSPs New independent chairman appointed for Current Account Switch Service Engagement Committee Current Account Switch Service designated as alternative switching system by the PSR **2017**: Challenger brands Starling Bank and CardOne become Participants of CASS, taking represented brands up to 47, covering 99.3% of the current account market ClearBank announces membership of Bacs	**2011:** In response to End-User expressions of concern, Payments Council confirms cheques to continue as long as customers need them **2012:** C&CCC appoints independent (non-Member) Chair of the Board **2013:** C&CCC appoints two independent directors **2014:** Decision to move to an electronic processing system while maintaining cheques **2015:** Legislation passed to enable digital images of cheques to be exchanged instead of requiring the original paper cheque as required by 19th century legislation C&CCC appoints independent (non-banking) chair **2016:** Decision to move to a Guarantor model instead of shareholders, with skills-based selection of Board directors and increased independent directors. Image-enabling legislation takes effect **2017**: Launch of the Image Clearing System as the first UK payment system using the ISO20022 messaging standard to deliver a shortened clearing cycle (next working day) for transactions of unlimited value (no cap). Enables banks to introduce app-based cheque deposits and remote deposits by businesses and charities. Switch to APIs to enable greater access from challenger banks and other new Participants, and stimulate development of a competitive market in ancillary services. Number of direct Participants set to double by the year end with the entry of challenger banks, but with most of the 400 banks participating in the cheque clearing continuing to act via larger sponsor banks.	**2010:** Transaction limit increased to £100,000 **2011:** Direct Corporate Access service extended to 24/7 processing **2012:** FPSL fully extracted from CHAPS Co and established as a standalone PSO with 10 members, dedicated CEO and team of 8 FTEs Migration of remaining bill payments and standing orders to Faster Payments PayPal launched as Direct Agency **2013:** Introduction of one director, one vote on Board of Directors and abolition of minimum participation costs for small PSPs **2014:** Paym launched via Mobile Payments Service Company (MPSCo) 100 million payments processed in a month **2015:** Transaction limit increased to £250,000 Guaranteed Settlement via prefunding introduced **2016:** Competitively provided cloud-based aggregator technical accreditation service launched and 5 competitive technical aggregators accredited Raphaels and Metro Banks become direct Participants under new access model Enhanced risk based Participant assurance model deployed Non-bank PSP settlement model (FADA) proposed to BoE **2017:** New challengers Starling, Monzo and Clear Bank become direct Participants ISO 20022 / 8583 mapping tool deployed Universal Trust Service for Payments launched Team grows beyond 40 staff

1.2 Overview of the current state of the PSOs

It is hard to define a current state of the PSOs as the payments industry in the UK is undergoing continuous change. There are change projects and new developments across the whole spectrum of the stakeholder community. Individually, the PSOs have been working on radical changes to their governance, have recently introduced new services such as CASS and Paym and have substantially addressed the issues associated with direct access. The PSR recently commented that 2017 will be a record breaking year for access to payments systems as direct participation in Bacs and FPS is set to almost double. C&CCC will launch the new ICS Co for the digital processing of cheques, and it is likely the current structure for paper processing will cease to exist in the not-so-distant future. In addition, there are wider projects to simplify access to promote competition, including access to sort codes, common participation models and rules, common messaging standards, and the consolidation itself. While in the past most change was mandated by the regulators, there have been recent internal efforts which signal a shift in the industry, for example new access models. Externally, many projects are under development stemming from the different work streams of the PSF strategy: the Open Banking implementation entity and the recommendation to bring together work on APIs across payments; the New Payments Architecture (NPA); and those responding to End-User needs such as request to pay which the PSOs have been working on concurrently with the PSF.

The 2008 global financial crisis highlighted the critical role that payment systems could play in both transmitting and preventing financial contagion between finance industry players. In recognition of this, international standards have been developed, including the CPMI-IOSCO Principles for Financial Market Infrastructures. For the PSOs specifically, this led to HM Treasury “recognising” Bacs and FPS as systemically important payment systems under the Banking Act 2009. This gave the Bank of England formal supervisory remit over these systems to replace the informal arrangements in place before. Whilst payment systems have continued to demonstrate great resilience, it is critical to maintain and improve this in the face of significant changes to the industry.

As part of this work, Bacs and FPS have been significantly developing their cyber defences, being among the first organisations after the Bank of England to undertake independent CBEST cyber testing in 2015, and developing a common cyber operating model with their shared technology supplier.

In the face of this evolving landscape, each of the PSOs conducts continuing assessments of changing End-User needs and their ability to meet them, to drive and inform their respective strategies. Through these assessments and recently commissioned projects, certain areas for improvement have been identified:

i) In the case of Bacs and C&CCC, their current investment funding models are not entirely self-sufficient as they may depend on their Members for such investments. This means that the entities need to obtain Member approval for any new projects, which can delay the process, and also may result in them not getting adequate funding to initiate research and innovation. This can result in lost opportunities for the payments community. In the case of FPS, their model has incorporated a research and innovation budget that allows the company to carry out projects with greater agility.

ii) Bacs and FPS are both entities limited by guarantee while C&CCC has a shareholder structure. However, the three schemes have Boards which are made up of a combination of Directors appointed by Members as well as a minority of Independent Non-Executive Directors. This can create conflicts of interest which hinder the decision making process. This in turn impacts the speed and agility with which the PSOs can react to the changing needs of End-Users.

iii) Although the three PSOs are set up as not-for-profit, their governance structure is not optimal to work in the public interest, as there are Member appointed Directors, who may have conflicts of interest. This means that the schemes may at times not have independent control over the use of their funds and certain strategic initiatives may be postponed or not pursued. While changes have been made since some of these issues were identified, full implementation by the PSOs of their planned changes has been put on hold in light of the planned consolidation.

In addition, the PSO DG considered the structural issues highlighted by the PSF. Namely the fact that there is not a common entry point for access, the different forms of technology and services offered by each of the schemes means there need to be different on-boarding processes and there is a potential duplication of efforts which raise the costs of access for the payments community. According to the PSF:

> *"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 payments 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."*

While there is no common entry point, recent analysis conducted by the five schemes including Bacs, C&CCC and FPS for the Interbank Systems Operators Coordination Committee (ISOCC) *Common participation models project* has identified that on-boarding processes are remarkably consistent between schemes, and that while there is some duplication, it may not be such a significant issue now as it might have been in the past. The efforts that the schemes have made to improve access over the last two years are bearing fruit with FPS participation having increased by 50 per cent in the last six months, Bacs planning to on-board two new challengers in the next six months and ICS membership expected to double within a few months of its launch, all in all, enabling competition in the downstream market. This transformation by the existing PSOs has been recognised by the PSR in their report on PSO Governance and Access. The introduction of ICS will also enable full sort code portability, so that agency banks can move without the need to change sort codes for the first time.

1.3 Origin of the proposal to consolidate Bacs, C&CCC & FPS

The origin of the proposal to consolidate the three schemes into one single entity, the NPSO, comes from the draft strategy published by the PSF, which was later reinforced in their final publication. The issues around the lack of a common entry point for access and different on-boarding processes which the PSF identified, are exacerbated by the current structure and governance model of the PSOs. This could potentially be improved by consolidating them into one single entity, as solution 14 of the PSF mentioned:

> *"To address these problems, in our Strategy we recommended consolidating three of the retail interbank PSOs; Bacs, C&CCC and FPS. Further consideration needs to be given on whether it is also appropriate to include the non-core services that these operators are responsible for. The PSO DG should ensure that the new Consolidated PSO be designed in a way that it is both capable of procuring the component parts of the NPA as part of its competitive procurement process and also acting as the Governance body for the various industry standards, including APIs. This requires structuring to ensure that it has expertise, knowledge and experience to support these activities."*

The NPSO will be able to take a singular view on the strategic development of products and services ensuring that there are no gaps or duplication of services. It will assist in ensuring a greater focus on the provision of these services to its direct customers – the PSPs as well as the End-Users. The single entity will be able to benefit from more scale and hence enhance the opportunities for its staff, enabling the better attraction and retention of capabilities. This, together with a single approach to risk management, will enhance security and resilience. It enables simpler and more effective governance and regulatory oversight, reducing effort and enabling greater focus on key areas.

It was also considered important that a common participation model was established. Even if the three schemes become part of the same entity, work will need to be done to ensure a common participation model, unless it is not practical to do so. It is worth noting that the PSF understands the participation model to cover areas such as:

- *Terminology.*
- *Eligibility criteria and baseline regulatory requirements.*
- *Categorisation of Participants and products offered by PSOs.*
- *On-boarding processes and migration to common connectivity models.*
- *Simplification in assurance.*

While important work has already been done by the ISOCC Common Participation Models Project, there are considerable benefits from consolidation in this regard, as highlighted in the PSO Governance Subgroup report. If there is one single entity, this means there will be a single strategic view across the three schemes. In terms of timing and duplication of efforts, this is important. Under a single, more agile entity, much of this duplication of effort would be eliminated. This benefit would extend to projects beyond the common participation model and aligned rulebooks, such as Participant assurance, and industry services such as sort-code allocation. The lower complexity and combination of diverse workforce and perspectives, combined with the potential for knowledge sharing, would likely mean the single entity is also able to be more innovative than the three entities separately.

Another key aspect of eliminating duplication is with regards to End-Users and Participants. A new entity would allow communication with one rather than with three separate entities. Whilst the rules for the specific schemes may remain different for a while, the process to participate in all three of them should be made easier by dealing with a single entity. This should eliminate unnecessary costs across the industry.

A single entity, putting aside convergence of multiple systems into a single or distributed system (which will present resilience opportunities and challenges), should allow a concentration of operational and risk management resources (as well as supporting services) currently spread across the three PSOs to enhance the overall management of risk and resilience in the systems. This single entity, also has the potential for cost efficiency opportunities through combination and the more efficient and cost-effective implementation of the NPA.

Finally, the PSO Governance Subgroup report also commented on the potential for the single entity to enable competition through infrastructure procurement. The single entity will be able to manage a better coordinated approach to infrastructure provision, facilitating the development of potential new providers and structuring the procurement such that it is split in terms of scope and timing for the benefit of the industry.

It was as a response to these benefits and proposed solutions that the PSO DG was formed to opine and give recommendations on the key elements of the NPSO's structure. As mentioned above, the NPSO should be designed in a way that helps enable other components of the PSF strategy, which are commented on, in section 1.4.

1.4 The role of the NPSO in realising the UK payments strategy

It is clear that the NPSO will have a wider remit than just consolidating the existing schemes. It is meant to be the pre-eminent body that will drive best in class payment infrastructure in the UK for the benefit of the stakeholder community. Beyond this, it must also continue to enable development and innovation some of which may sit (initially at least) outside its direct management, but which will need its deep involvement. This could include certain developments the PSF outlined in their strategy, relating to solutions to improve payments in the UK across four areas. These solutions were widely consulted, securing broad support. The solutions were categorised as:

- *Responding to End-User needs.*
- *Improving trust in payments.*
- *Simplifying access to promote competition.*
- *Building a new architecture for payments.*

The NPSO will help not only to simplify access to promote competition but will also help deliver other identified solutions. As a single, primary deliverer of many of these solutions, the NPSO will be more efficient than the current three entities and it will be able to realise projects and their benefits more quickly and cost effectively. It is essential for the different stakeholders to collaborate and innovate, as this will lead to a benefit for all service users.

Table 1 maps out the potential responsibilities of the NPSO in relation to the solutions proposed by the PSF. “Current or future responsibility” means solutions which are offered today and are the responsibility of the existing PSOs, or that are under development, or that will be developed by the NPSO. “Interested party” means we acknowledge that there may be a degree of communication and collaboration required, but that the solution is not likely to be delivered under the direct responsibility of the NPSO.

It is important to highlight that this may evolve as different work streams progress. The PSF outlined phased delivery during 2017. Solutions will be at differing maturities. While the NPSO should seek to collaborate and enable innovation, a successful launch of the new entity requires that it must adhere to its own demanding timeline.

Table 1. **Mapping the role of the NPSO to the PSF solutions**

PSF Solutions		PSO responsibility	
		Current or Future	**Interested party**
Responding to End-User needs	Request to Pay	✓	
	Assurance Data	✓	
	Enhanced Data	✓	
Improving trust in payments	Guidelines for Identity, Verification, Authentication & Risk Assessment		✓
	Payment Transaction Data Sharing & Data Analysis	✓	
	Financial Crime Intelligence Sharing		✓
	Trusted KYC Data Sharing		✓
	Enhancement of Sanctions Data Quality		✓
	Customer Awareness and Education	✓	
Simplifying access to promote competition	Access to Sort Codes	✓	
	Accessible Settlement Account Options	✓	
	Aggregator Access	✓	
	Common PSO Participation Model and Rules	✓	
	Establishing a Single Entity	✓	
	Moving the UK to a Common Message Standard	✓	
	Indirect Access Liability Models		✓
A new architecture for payments	A Layered Model for Payment Processing	✓	
	Common Messaging Standards, Open Access APIs & API Governance	✓	
	A Simplified Delivery Mechanism	✓	
	Overlay Services	✓	

The PSO DG underlines that this is not meant to be a view of responsibilities the NPSO will take on singlehandedly. For example, within the NPA, there are ongoing projects in parallel to the set-up of the NPSO such as the Open Access APIs. Furthermore, there are other key strategic objectives beyond those promoted by the PSF including regulatory requirements for infrastructure and developments in other areas. It is essential to recognise which organisations are best placed to deliver these objectives and for the NPSO to be an enabler wherever it can. In some instances, the core responsibilities will lie outside the immediate scope and responsibility of the NPSO, but its actions may act as a catalyst to enable innovation to thrive in the payments community of the UK.

This may mean that some of these solutions may become a part of the NPSO in the future, or they may not. The future Board of the NPSO will have to determine this strategy and, to help guide it, the PSO DG has made the recommendations set out in this report.

2 NPSO Strategic Framework

This section details the PSO DG's recommendation on the purpose and strategic objectives of the NPSO. It also includes an outline of the discussions that the PSO DG has initiated with respect to culture, principles and values.

The existing operating models, corporate structures and ownership of the three retail PSOs have evolved over a number of years, for some of them from a time when new entrants to banking and payments were infrequent and all that was needed was for some management of the collective interests of a number of significant industry players. These collaborations created effectively a form of shared service. However, in more recent years, significant changes have happened, introducing new Participants into the payments ecosystem, as well as new technologies which have enabled more diverse forms of participation. The PSOs have individually responded to this, enabling a considerable degree of change, and leading to the emergence of what is now a world-leading payments infrastructure.

The establishment of the NPSO would provide the opportunity to establish a single entity which could lead the industry into the further change that is likely to continue in the future. With this in mind, this section sets out the recommended purpose and strategic objectives of the organisation, and in whose interests it would need to operate.

The NPSO's strategic framework aims to guide the strategy for the future organisation by providing a clear and unambiguous statement of its purpose and objectives. This captures some of the objectives laid out in the PSF's report, but also adds elements the PSO DG believes would help the NPSO achieve its purpose. Previous internal projects from each of the individual PSOs which aimed to establish their individual objectives and strategic direction have been considered as part of the input, albeit in the context of the new consolidated organisation. The purpose and each strategic objective are detailed in this section and are the essential underpinning for all the other recommendations provided by the PSO DG.

Expanding on them, we include suggestions for the new Board of the NPSO to consider when establishing a set of culture, principles and values for the new organisation. In order to arrive at these suggestions, we have received input from the senior management of the existing schemes, in order to identify the expression of values that resonates with them, as well as with the purpose and strategic objectives.

2.1 Company purpose and strategic objectives

In this sub-section the PSO DG provides the rationale behind the purpose and strategic objectives of the NPSO

Any company needs an absolutely clear purpose that defines what is expected of it by all its stakeholders. This becomes even more important where it might have a potential monopoly in the provision of economically vital and enabling services, and where it exists to deliver a variety of public goods, rather than shareholder value in a competitive market. Properly constructed, and supported by a clarifying set of strategic objectives, this purpose should allow the company to conduct itself to maximum effect for years to come.

While the company purpose and strategic objectives need to recognise the present, they should also guide the strategy of the NPSO over the long term. The purpose and strategy must anticipate evolving needs, and allow the new entity sufficient room to shape its strategy for today and for the future. In the short term, the NPSO will fulfil its purpose with existing payment systems, such as direct debits, cheques and electronic payments. Over the longer term, and in the light of the work being done in the PSF, it will probably determine that new systems are better suited to fulfil its purpose and strategic objectives. The PSO DG have proposed characteristics and end goals of what the NPSO should achieve, but have not made them specific to any present-day system or technology. The purpose and strategic objectives are described in Figure 2 below.

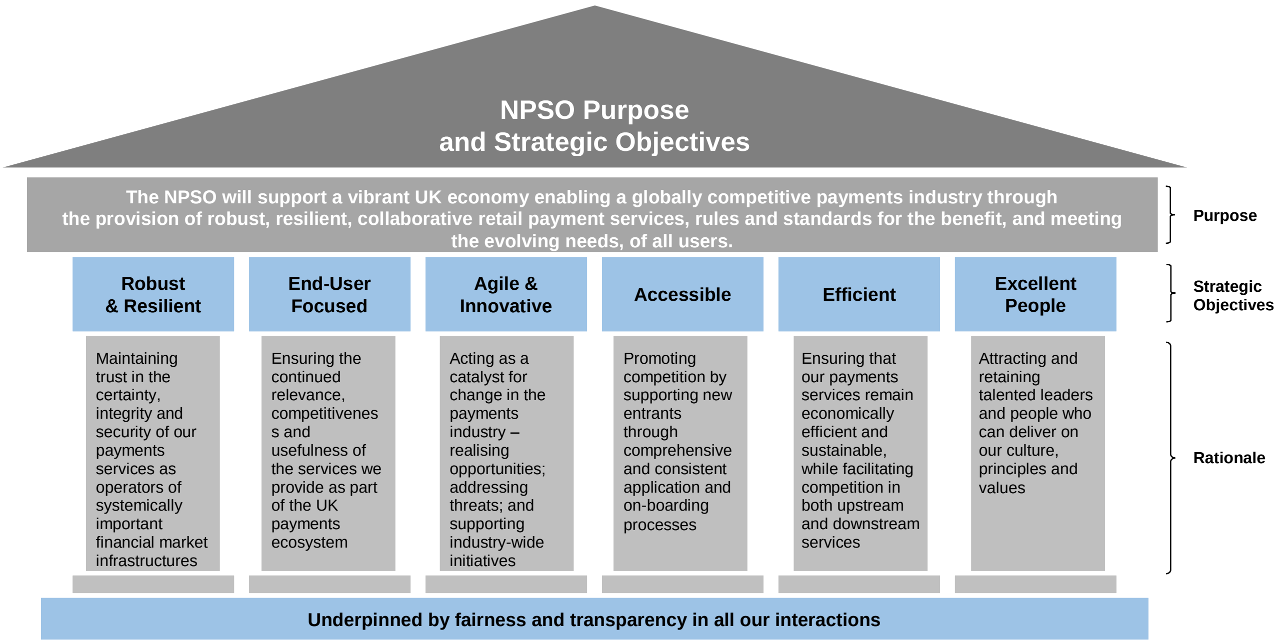
We have concluded that the purpose of the NPSO is to **'support a vibrant UK economy enabling a globally competitive payments industry through the provision of robust, resilient, collaborative retail payments services, rules and standards for the benefit, and meeting the evolving needs, of all users'.**

Each phrase in this purpose has had to win its place in our discussions and analysis over the last few months. Looking at each component in turn, our rationale can be summarised as follows:

Support a vibrant UK economy…	The NPSO exists to support the UK economy. It is not to build value directly or indirectly for a set of shareholders or a narrow set of stakeholders. The aspiration is that the NPSO will contribute to the growth, development and dynamism of the UK economy.
… enabling a globally competitive payments industry …	The NPSO needs to be a key enabler for an innovative UK payments industry that enables competition both in the UK and globally.
… providing robust, resilient …	The safety and security of its services, given their critical national infrastructure status and systemic importance to the UK's financial system, are essential.
… collaborative …	Generally, the NPSO is operating only in the spaces where collaboration between competitors within the payments landscape is essential, or economically or socially highly desirable.
… retail payments …	The NPSO is operating in the retail payments market space providing services that meet the needs of consumers, businesses, the third sector and government, but not the wholesale space where banks and other financial institutions move money between themselves on their own account.

… services, rules and standards …	The NPSO will provide services directly Participants, where the services required are common to all. In order to do this it will need to define rules and standards that all industry Participants must comply with in order to enable competition in their delivery of services.
… for the benefit of and meeting the evolving needs …	The NPSO not only has to meet the current needs of its stakeholders, but must investigate and anticipate how these needs will change.
… of all service users	The NPSO operates for the benefit of consumers, businesses, the third sector, government, and all forms of PSP, banks, building societies and all forms of new entrants.
Underpinned by fairness and transparency in all our interactions	The NPSO will have to win the trust and support of all its stakeholders to deliver its purpose and fairness and transparency will be critical to achieving this.

Figure 2. **NPSO Purpose and Strategic Objectives**



Further detail on each of the six objectives is provided below.

1. **Robust and Resilient:** maintaining trust in the certainty, integrity and security of its payment services as operators of systemically important financial market infrastructures: The NPSO should:

    a. Operate with exemplary governance and meet or exceed regulatory standards and obligations.
    b. Assess and mitigate operational risks to the end-to-end flow of payments to and from PSPs across the ecosystem, including but not limited to the core infrastructure.

   c. Assess and mitigate financial and technological risks between Participants and the NPSO.
   d. Avoid payment and liquidity risk and manage systemic risks arising in the retail payments systems to give payment certainty.
   e. Protect the interests of all End-Users and Participants, delivering excellence in information security and striving to protect against financial and cyber-crime.
   f. Help enable PSPs to deliver services which are safe and secure ensuring the integrity of payments.

2. **End-User Focused:** ensuring the continued relevance, competitiveness and usefulness of the services we provide as part of the UK payments ecosystem: The NPSO should:

   a. Offer a level of control, assurance, security and visibility for End-Users that helps to instil confidence and protect from fraud.
   b. Catalyse and lead collaborative innovation, including new products for the benefit of consumers and the economy.
   c. Be collaborative and responsive in order to ensure that payments services operate in line with continually evolving End-User expectations.
   d. Leverage anonymised collective data for the benefit of End-Users and broader society without compromising End-User data privacy.
   e. Operate a governance model for business as usual and change that effectively considers Participant and End-User needs and perspectives.

3. **Agile & Innovative:** acting as a catalyst for change in the payments industry – realising opportunities; addressing threats; and supporting industry-wide initiatives: The NPSO should:

   a. Be at the forefront of global payment developments for the benefit of stakeholders.
   b. Be a catalyst for payments related innovation and opportunities to enable greater competition in the market and improve services for End-Users and Participants.
   c. Pro-actively identify and pre-empt threats to our existing payment services.
   d. Have the financial and operational capacity and capability to manage effectively and deliver on our strategic, regulatory and discretionary change priorities.
   e. Demonstrate effective decision making within a robust change governance framework.

4. **Accessible:** promoting competition by supporting new entrants through comprehensive and consistent application and on-boarding processes: The NPSO should:

   a. Manage well-defined and easy to understand standards and rules for access to the payment systems for which it is responsible.
   b. Ensure our participation criteria, technology requirements, rules and procedures and assurance requirements achieve the right balance between: offering sufficient simplicity of access to encourage competition and new entrants; and maintaining our underlying financial stability duties and the integrity and rigour of access controls and management in place for existing Participants.
   c. Provide effective support to those considering and/or progressing new Participant status.
   d. Collaborate with all in the payments eco-system who are seeking to innovate and develop payments services and businesses in the UK.

   e. Ensure its systems are designed to facilitate interoperability with global payment and currency exchange systems.

5. **Efficient:** ensuring that its payments services remain economically efficient and sustainable, while facilitating competition in both upstream and downstream services: The NPSO should:

   a. Maximise economic efficiency through flawless and cost-effective handling of different types and increasing volumes of payments through our infrastructure.
   b. Operate a sustainable financial model built upon fair and equitable cost recovery for business as usual service run costs, aligned wherever possible to underlying cost drivers.
   c. Operate an effective model for research and innovation.
   d. Foster third party expertise and capabilities where it makes commercial and operational sense and effectively source services to contribute to efficiency.
   e. Maximise the cost efficiency and flexibility of the payments platform operations through the application of robust procurement and vendor selection, governance and management processes.

6. **Excellent People:** attracting and retaining talented leaders and people who deliver for stakeholders, consistent with its culture, principles and values: The NPSO should:

   a. Foster strong and effective leadership.
   b. Attract, develop and retain the talent required to both deliver exceptional standards of service to Participants and End-Users and be an enabler of innovation in the payments market.
   c. Deliver an inclusive, collaborative and high performance culture where employees can fulfil their potential.
   d. Reward and manage its employees in a fair and open way.
   e. Proactively and effectively contribute to and collaborate on pan-industry initiatives via the direct involvement of its people.

A key element when understanding the strategic framework, is that the future Board of the NPSO will need to seek to strike a balance between the six objectives, while always seeking to fulfil its purpose. For example, if a certain action will make the NPSO more efficient, but will limit accessibility it may not be desirable to pursue this action. As such, an evaluation will need to be made to determine the overall impact on the stakeholder ecosystem, and determine which action (or combination of actions) most effectively serve society. This mind set should be enshrined in the organisation's culture, principles and values.

2.2 Culture, principles, and values

In creating the NPSO it will be critical to design an entity that attracts, and is able to retain and nurture, high quality, highly capable directors and staff who buy into the purpose of the company. A clear set of values can result in a working culture which is attractive for excellent people. Hence we undertook two distinct, initial exercises to provide guidance for the future Board of the NPSO regarding the culture, principles and values to which it should aspire.

Informed by a PSO DG discussion around the type of culture the NPSO should have to be able to fulfil its purpose, an initial proposition was developed. The overarching characteristics at this stage were considered to be that the NPSO should have a collaborative culture where everyone fulfils their potential. In this context the belief set was described as:

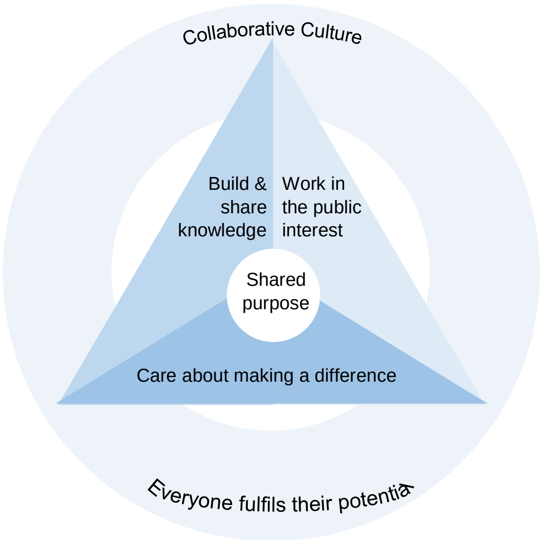


Figure 3. **NPSO culture, principle and values**

- **Embrace our shared purpose:** We have shared purpose within and across all Participants in the retail payments industry supporting a vibrant and globally competitive UK economy.
- **Work in the public interest:** We focus on the needs and interests of all stakeholders across the service user spectrum.
- **Rigorously build and share knowledge:** We foster a culture of inclusivity and collaborative thinking in order to facilitate knowledge sharing within the payments ecosystem. We shape international standards through leadership and thought leadership.
- **Care about making a difference:** We attract staff who care about making a difference and enable them to fulfill their potential as individuals and as leaders.

As an additional contribution to the future Board's thinking on the principles and values that would underpin the NPSO's culture we sought input from senior managers of the existing schemes. This working group felt the values of the NPSO could best be captured in a simple set of words or phrases to reflect the sort of organisation the NPSO should be, to fulfil its purpose and be recognised as an employer of choice. This exercise resulted in the proposal of six core values to define the NPSO's culture and principles:

- **Independent** in terms of:

  - Conducting good governance, with a high degree of Board effectiveness.
  - Being self-funding, with a sufficiently capitalised balance sheet (resilience and investment) and positive cash flow.
  - Not being or being seen to be beholden to any specific sectoral interests.
  - Setting a strategy that meets all of its prioritised stakeholder needs.
  - Having a clear, informed and strong voice in the market.
  - Being able to control and adapt its own operations to meet changing market needs.
- **Trusted** in terms of:
  - Putting a priority on safety and resilience.
  - Understanding, addressing and prioritising the needs of users.
  - Being transparent about its governance, strategy and priorities.
  - Acting, and being seen to be acting, in the public interest.
  - Treating the UK's payment system as a strategic asset for the economic good.
  - Conducting its business to a high international standard.
- **Forward thinking** in terms of:
  - Keeping the system safe from new and potential threats.
  - Making it easy for providers and users to access the system.
  - Being able to conduct detailed research into market, business and operational needs, capabilities, and opportunities.
  - Anticipating, developing and meeting user needs.
  - Creating future provider value opportunities.
  - Understanding, influencing and meeting market expectations.
  - Developing, understanding and applying relevant technology opportunities.
- **Driving change** in terms of:
  - Delivering change effectively, efficiently and quickly.
  - Avoiding market transformations being constrained by the pace of the slowest.
  - While ensuring that the system remains safe and resilient.
  - Meeting regulatory needs and policy expectations proactively.
- **Expert and professional** in terms of:
  - Carrying out its business in a well governed, controlled and compliant way.
  - Conducting business with well-founded processes that represent best practice.
  - Employing people with a range of industry skills and experience.
  - Being risk based in how work is scoped, controlled and conducted.
  - Ensuring that stakeholders can be confident in both the people and the company.
  - Providing excellent career opportunities, balancing corporate memory, deep industry skills with dynamic new thinking and approaches.
- **Plain spoken** so that:
  - Communications are clear and easy to understand.
  - Stakeholders understand the business, its operations and that there are 'no surprises'.
  - Policy makers and regulators are able to make effective and efficient policy and regulation.
  - The market is informed on the key issues.
  - The company is managed consistently and transparently.
  - The company is high performing because staff challenge and give feedback.
  - Staff are clear about what they have to do, why and by when.

These suggestions are to give the Board of the NPSO an early steer on the sort of values which will help make it successful, and which will help to develop a new, distinct and inclusive culture. The Board will need to continue to shape them, in line with their own vision for the NPSO, to determine a final set of values.

3. Target Operating Model Design

Includes recommendations on corporate structure, ownership, Board structure and additional functions and initiatives

The corporate structure, ownership and governance of the NPSO and the Target Operating Model (TOM) will need to be designed such that the NPSO can deliver its purpose and strategic objectives outlined above not just at the point of creation and consolidation, but over the longer term. Throughout the consolidation journey, it will be essential to ensure integrity of service is maintained and risk managed in the existing three schemes as well as to anticipate how the functions of the NPSO might evolve over time.

In this section the PSO DG discusses the design options considered and the recommended company and Board structures, wider corporate governance and funding. These are all intertwined and must be seen as a group of recommendations that, together, should enable the NPSO to achieve its purpose and strategic objectives. Taken piecemeal, these recommendations are unlikely to achieve their objectives: for instance, the right governance structure, with the wrong funding model, would impede the new entity from fulfilling its purpose. ***Therefore the PSO DG recommends that the recommendations included are considered in their totality rather than be picked out piecemeal.***

The PSO DG also provides guidance on what the current state operating model is, and recommendations on functions that should or could be carried out within the new operating model. The future state TOM will be developed and agreed by the NPSO. These functions have been grouped as follows:

- **Internal functions**: Seamless continuity of these functions is essential. Examples of these functions include operations management, Participant assurance, on-boarding, risk management and other critical functions.
- **Outsourced functions (Non-UKPA)**: these functions cover other providers, who do not sit within UKPA, including the core inter-bank payment services delivered via large infrastructure providers, as well as legal panels, technical accreditation services and others.
- **Outsourced functions (UKPA)**: these are the shared services provided centrally to the individual PSOs (and others) without which (e.g. human resources, premises, facilities, internal audit) the PSOs could not continue their daily operations. We anticipate that, at first, existing contracts will be maintained and the transition would not significantly impact this relationship.
- **Additional or expanded functions**: There are a number of initiatives and functions that are currently managed separately or in conjunction with the schemes that will need to be considered for inclusion within the NPSO or to be managed elsewhere. Each of these will need to be assessed on differing criteria and timescales, and after appropriate consultation with other relevant industry bodies and initiatives (e.g. Payment Strategy Forum, Open Banking Implementation Entity, etc.). These include:

    - **The Payments Industry Standards function** comprises expert human resources, trusted relationships, infrastructure and innovation. The activity of this function is for a broader community than just the three retail PSOs. ***Therefore the PSO DG recommends that this function is transferred into UKPA during Stage One, with a view to integration into the NPSO during Stage Two.***

- **The Payments UK Design and Delivery capability** is represented by the function's team and proven experience, tools and methodology for implementing large scale collaborative change. The activity of this function is also for a broader community than just the three retail PSOs. ***Therefore the PSO DG also recommends that this function is transferred into UKPA during Stage One, with a view to integration into the NPSO during Stage Two.***
- **New Payments Architecture** is an initiative from the PSF that is currently in the design phase as a collaborative project between the PSF and the current PSOs. ***The PSO DG recommends that this should become a project within the NPSO as soon as is practicable.***
- **Open Banking Implementation Entity** is a new corporate entity (which is currently being designed) to deliver the Open Banking functionality being developed which will require management and leadership in BAU. ***The PSO DG recommends that the NPSO Board collaborates with the leadership of the Open Banking Implementation Entity to establish whether this initiative should become part of the NPSO's responsibilities and, if so, what are the appropriate timing and practical steps. A decision on whether it will, at some point be taken into the NPSO, will need to be made during this year.***

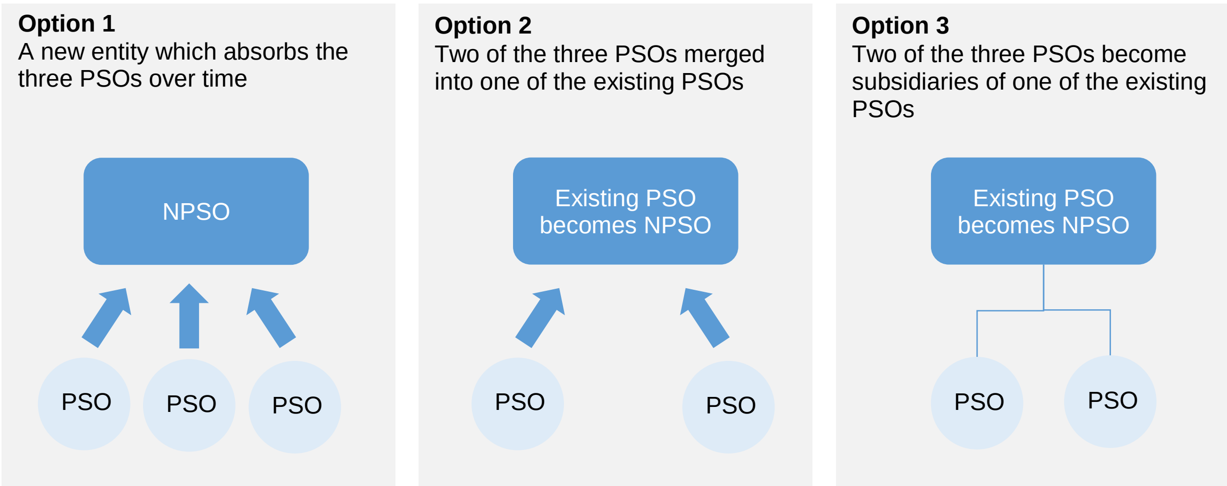
3.1 Design options

Includes recommendation on how to create the new entity

The first step in designing the new entity has been to consider the method by which the NPSO would be created. This would impact the subsequent design features, structure and the extent to which a new, different organisation could be constructed. At a high level, the design options considered were:

- **Option 1**: would involve the creation of a new entity, the NPSO, which would acquire the three existing PSOs and merge their activities over time. By creating such an entity, there is the opportunity to set it up in an optimal format such that it is aligned to, and is fit to meet the purpose and strategic objectives for the NPSO. It would also reduce the risk of legacy PSO issues transferring into the NPSO. This option then allows each of the three PSOs to be moved into the NPSO on equal footing. There is likely to be lower transaction and complexity risk with elements of each PSO being consolidated into single functions at NPSO level as and when it is appropriate.
- **Option 2**: would involve one of the three existing PSOs becoming the NPSO, and the remaining two PSOs would merge into it. As this option involves a change to one of the existing PSOs rather than the creation of a new entity, the three PSOs would not be on equal footing. Legacy issues from the existing PSOs could constrain design elements and the ability to achieve the NPSO's strategic objectives.
- **Option 3**: would involve one of the three existing PSOs becoming the NPSO, and the remaining two would become subsidiaries. Similar to option 2, this option involves a change to one of the existing PSOs rather than the creation of a new entity, and would result in the PSOs not being on equal footing. Additionally, the two PSOs operating as subsidiaries of the NPSO could continue to operate in a similar manner as they do today and the overall NPSO (including its subsidiaries) might not see the structural and cultural changes which might otherwise benefit from if fully integrated into a new entity.

Figure 4. **NPSO design options**



The PSO DG recommends that a new entity should be created which would acquire the three existing PSOs and merge their activities over time (Option 1). (The PSO DG analysis of the options is at Appendix 7.5). The conclusion was primarily driven by three factors:

a. Lower transition complexity and risk given the fact that appropriate due diligence can be set up and the NPSO will absorb the existing schemes in an organised, planned and efficient manner. This would enable transfer of existing contractual relationships without bringing in any liabilities deemed to be an unnecessary burden on the new entity.

b. This option reinforces perception of a merger, as opposed to one PSO being a dominant force, with more influence over the process than the other two. This will enable a new culture to be more easily accepted, as well as create a more collaborative environment.

c. Reduced risk of the NPSO TOM design being constrained or compromised by legacy PSO challenges. The opportunity to create a new entity, with an entirely new funding structure and Board set up means it can learn from complexities created in the past, from recent learnings and developments from some of the schemes and create a more independent, self-sufficient organisation.

Having clarified the best option for the new entity to be created, the next step was to consider what type of entity it should be.

3.2 Company structure

The company should be a company limited by guarantee

The company structure is essential to enable the entity to fulfil its purpose. It will determine the mechanisms which can be used to enforce accountability and ensure the strategic objectives are met. The context and experience of the existing PSOs, together with the case for change highlighted by the PSF[1], were the considerations which informed the PSO DG's recommendation. There is a broad consensus that the NPSO would act for the benefit of society and service users as a whole, and not for shareholder or owner profit. With this in mind, the ***PSO DG recommends that the type of company should be a company limited by guarantee***.

A company limited by guarantee does not have shareholders which provide equity capital, and seek to earn a return on their investment. It has 'Members' (as defined in the Companies Act[2]). These members are not members of a club or association, have very limited financial exposure to the company and may not sell their interest or take value from dividends. They do, however, hold the Board to account for the delivery of the purpose of the company. For this reason the term Members and Guarantors in this document are synonymous. As Guarantors, they would provide a very limited financial guarantee (probably £1), but most importantly act to hold the Board to account for the continuing fulfilment of the purpose of the company. With an appropriate balance of Guarantors, the Board would have input from a significant representation of its stakeholders. Additional mechanisms for any gaps in stakeholder inclusion, would also need to be put in place, as set out in the following sections on Board structure and wider corporate governance. It is anticipated that the Guarantor group will eventually be wider than the current membership group of the existing PSOs, and more inclusive. The expansion of this group of members will be progressive, since it will be necessary for the initial Guarantors to come from the existing Guarantors/shareholders of the existing PSOs.

The PSO DG recommends that Members should be Guarantors, and the amount for which they would be liable should be a nominal amount. The recommendation is that the Guarantors may comprise any corporate entity or association (not private individuals) which is part of the payments ecosystem and wishes to be part of the body which holds the Board to account. The Guarantors would hold the Board to account at an Annual General Meeting (AGM), and any necessary Extraordinary General Meetings (EGM). Since the PSO DG recommends this to be a varied group it would help provide oversight of the Board from different parts of the wider payments community. This will help to ensure that the Board makes decisions in favour of the broad community interest, and as such fulfils its purpose and strategic objectives.

For the future, there will need to be an application process to become a Guarantor, with an acceptance process governed by the NPSO Board, as well as a process for withdrawal (voluntary or otherwise) from membership. The NPSO Board will need to establish an appropriate balance between the number of Guarantors necessary to reflect the stakeholder universe with the need to ensure that each Guarantor has a meaningful role. Guarantors would have the ability to vote for the re-appointment of Board Directors who are at the end of their term of appointment, at the AGM. They would also be able to suggest individual candidates for selection on the basis of skills and experience. It is the intention that all Directors would be appointed to the Board after undergoing a rigorous, open and transparent selection process. Directors, including any suggested by Members, would not represent one specific Member or a group of Members, but would work as a collective Board, to achieve the NPSO's purpose and sustainability.

[1] Payments Strategy Forum, *A Payments Strategy for the 21st Century* (2016), p.5-13

[2] *Companies Act 2006 Chapter 46*, Section 112

There will need to be an initial set of Guarantors to set up the NPSO. ***The PSO DG recommends that this initial group should comprise the existing company members/shareholders of the existing PSOs*** *(as at 31st of March 2017).* (It is not envisaged that the Bank of England would wish to become a Guarantor of the NPSO[3]).

It is envisaged that there will be three stages to the transition from current state to end state.

- **Current state**: Bacs and FPS are both companies limited by guarantee, with company Members. While C&CCC is set up with a shareholder structure, the new ICS Co. is likely to be a company limited by guarantee.
- **Stage One**: the NPSO would need to be set up with an initial set of Guarantors. These would come from the existing Members/shareholders, as it will be essential for them to become Guarantors of the NPSO. In order to achieve Stage One, there will be two different approaches.
    a. The first involves Bacs and FPS, where it is envisaged that Guarantors (members) would resign their membership in the existing individual PSOs, and, concurrently become Guarantors of the NPSO under the new Articles of Association. At this stage, the NPSO would become the sole company membership for Bacs and FPS so that they become subsidiary companies of the NPSO, as the holding company.
    b. In the case of C&CCC, as the company is currently undergoing a change programme to create the new ICS Co, there must be special considerations depending upon exactly how the ICS Co is set up. It is likely that the NPSO would not be taking on the whole of C&CCC, but only the new ICS Co. It is possible that this new company would be set up as a subsidiary of the NPSO from its inception, and initially would outsource its operations to C&CCC in parallel with the paper clearing as this winds down.

  During this Stage One, the functions and responsibilities, of the existing PSOs as system operators would remain with the PSOs, including their existing regulatory responsibilities.
- **Stage Two:** during this stage the functional Board and management of the NPSO would be established (with reserved powers) and the implementation of centralised functions, where appropriate. Detailed planning for the implementation of Stage Three will also be conducted during this stage.
- **Stage Three**: the transfer of system operator responsibilities is likely to be a phased approach and, at least in the cases of Bacs and FPS, would require regulatory approval leading to agreement between the Boards of the existing PSOs and the Board of the NPSO as to the precise mechanism and timing of transfer. Once the handover of system operator responsibilities is satisfactorily completed, the PSOs would no longer have their responsibilities as system operators, since these responsibilities would have been assumed by the NPSO. Legal advice will be required to determine the most appropriate ongoing corporate structures, as well as the appropriate model to return or up-stream capital. It is envisaged that the detailed implementation in relation to ICS Co would have been completed by this stage.

The NPSO Board will define and manage an application process to introduce new Guarantors in the future, as well as a process for withdrawal (voluntary or otherwise) from this role. This will include an acceptance process for new Guarantors under the control of the NPSO Board. In addition, it will need to establish the optimum composition of its target Guarantor group, to ensure that an appropriate "voice" is heard from the different elements of the stakeholder community, through the combination of the Guarantors and the wider corporate governance (see Section 3.5). ***Over the course of the first three years of its existence, it is recommended that the Board of***

[3] The Bank of England is currently a Member of Bacs and a shareholder of C&CCC.

the NPSO seeks to expand the Guarantor base such that it adequately represents the stakeholder community. After this three year period, the Board of the NPSO will need to keep the composition of the membership group under review so that it continues to be relevant and appropriately representative of any changes in the stakeholder universe. It is anticipated that the articles of association will include reference to the membership criteria, acceptance and withdrawal of membership. Since rules pertaining to membership are likely to be included in the articles of association, which are likely to have been part of the regulatory scrutiny during the process of initial approval of the NPSO, any future proposed changes to the membership model are likely to need to be subject to discussion between the Board, the Bank of England and the Payment Systems Regulator.

3.3 Board structure

Includes recommendations for a more independent Board than the PSOs currently have

The Board of the NPSO will have responsibilities as set out in the UK Corporate Governance Code, as supplemented by the Bank of England's requirements for the governance of systemically important financial market infrastructure operators. Such responsibilities will include:

- Setting and challenging the strategy of the company.
- Performing a regular evaluation of the performance of the management of the NPSO against the purpose and strategic objectives.
- Setting the risk appetite and risk framework, as well as monitoring risks in the business against it; determining the nature and extent of the significant risks it is willing to take in achieving its strategic objectives.
- Presenting an impartial, balanced and clear assessment of the company's resilience and sustainability.
- Conducting periodic assessments of its own performance and the performance of the Chair, Board committees and individual Directors.

Our recommendations set out below aim to provide guidelines so that there is sufficient flexibility in the future, but also to ensure essential considerations are not overlooked, including the right selection process and voting structure.

The PSO DG recommends that all decision making powers in relation to the NPSO and its business rest with the Board of the NPSO. At the point of acquisition, some of these powers may be delegated to the existing PSO Boards, with specific powers reserved to the NPSO Board. The PSO Boards will continue to be responsible for the running of each respective scheme, up until the point where there is agreement with the Board of the NPSO, and where necessary the Bank of England, that transfer of operator responsibility can take place without risk to the resilience or operation of the scheme.

During the transitional stage, there will be a need for fully compliant Boards to oversee the operations of the individual PSOs, for so long as they retain their system operator responsibilities.

To perform these tasks and achieve the NPSO's strategic objectives, the Board will need a set of Directors with the right combination of industry knowledge, diversity and independence. The Board as a whole would then possess the collective competencies necessary to succeed. A suggested Board competency matrix, is set out in Appendix 7.7.

The Board will need to have sufficient independence to truly deliver the company's purpose. Independence will be understood as defined by Financial Reporting Council (FRC) guidelines and the UK Corporate Governance Code as supplemented by the Bank of England consultation paper[4] relating to governance in recognised PSOs. The Board will also need to have End-User and stakeholder community perspective adequately represented among its Members.

Regarding the Board and its industry knowledge, there are two factors to consider. First, there will be an ongoing need for the NPSO Board, like the current PSO Boards, to have Directors with expertise in how payments systems work from a Participant perspective and viewed end-to-end. This expertise would ensure the Board has adequate knowledge to oversee, in particular, ongoing operational risks.

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[4] Bank of England, *The Bank of England's supervision of financial market infrastructures – Annual Report* (2016)

Secondly, there will be a need for the newly formed NPSO to have Board Directors, as well as senior staff, who understand how and why current schemes and in-flight programmes have come into being and how they operate.

The NPSO Board will therefore need a mix of Directors to enable it to achieve necessary independence of view, combined with industry knowledge and corporate memory from the existing PSOs.

As a result of these considerations, ***the PSO DG recommends the following Board structure and principles:***

Board snapshot	
Number of Board Directors:	8-12
Chair (independent, holds the casting vote):	1
Executives (CEO, CRO):	≤ 25%
Independents:	≥ 50%
Other Non-Executives:	≤ 25%

- ***One Director, one vote.***
- ***The Chair will hold the casting vote.***
- ***There will be an over-riding obligation on all Directors to act to achieve the overall purpose and objectives in the interests of all – this will be written into the Articles of Association.***

The right selection process will need to be put in place. This will require an Appointments Committee to be set up to ensure there is a formal, rigorous and complete competency framework for assessing the required capabilities and selecting candidates for the Board and senior management.

However, an initial Board may need to be set up before the Appointments Committee can be appointed. In the interest of speed of establishing a working board, due to the tight timeline the NPSO needs to be set up in, some initial Board Directors may need to be appointed from among the existing pool of PSO Directors. This could also bring in some corporate memory, so that the initial Board would better understand the lessons learned from past experience and the current operational, strategic and regulatory challenges the NPSO must face from day one. Also, it will help introduce a cycle of annual re-appointments and in turn ensure continuity of experience, combined with appropriate renewal of the Board.

After the initial Board is appointed, appointments or re-appointments of Directors would follow the process to be established by the Appointments Committee. This would ensure that the balance between skills, diversity and independence is created and maintained, and the public interest, End-User and stakeholder community would be appropriately represented on the Board. This would form part of the wider corporate governance which includes other fora, committees, and stakeholder engagement.

An important difference compared to the existing structures and governance of the current schemes is, that the Board will not have Member-appointed Directors. No Member (or Members) will have one Director as a representative of their specific interest. The right of Members will be to vote on the re-appointment of Directors. This will give the Board greater independence and avoid conflicts of interest, real and perceived, in its decision making.

3.4 NPSO appointments principles and transition risk management

The three PSOs today, and NPSO into the future, run essential elements of the UK's critical national infrastructure. This role is technically complex requiring deep skills, understanding and individual commitment. Absolute continuity of existing services is a vital underpinning of this transition.

The PSOs have been evolving rapidly to face growing challenges. As a part of this, the PSOs have been undergoing substantial role and personnel change. All the PSO Independent Non-Executive Directors (INEDs) and much of the senior management across the companies have been appointed within the last five years through open and competitive recruitment. They have been appointed from outside the existing organisations, and in many cases from outside the payments industry. It will be important that the NPSO be up and running at full capability as soon as possible to maintain the growing momentum and ensure the NPA vision for End-Users is delivered.

The PSO DG recommends that all new appointments be made in an independent and open way selecting the best candidate for the job. The intention is to ensure that maximum use is made of the talent pool already within existing PSOs. The need for existing positions is unlikely to change initially, which means that most staff will become a part of the NPSO, while remaining in their current position. At a later stage, where integration of functions begins to happen, there may be some changes in roles to ensure optimum use of skills and distribution of available talent and experience.

This approach should serve to reduce staff attrition and motivation risks which result from transitioning from three PSOs into the NPSO.

3.5 Wider corporate governance

The PSO DG recommends the establishment of two Advisory Councils to the Board to represent the interests of End-Users and PSPs.

The NPSO Board should be supported by its Board Sub-Committees, for example, Appointments and Remunerations Committees, Risk Committee, Audit and Finance Committee and perhaps separate special purpose Committees. These committees would ensure the Board has oversight of its key areas of responsibility. There will be a transition where some of the existing structure remains, such as the CASS specific governance arrangements will need to be kept in place, as they are a direct result of a CMA Remedy linked to the Current Account market review.

Executive Committees will support the Chief Executive. These will be a combination of internal business committees and external market operations fora (on which PSPs must continue to have involvement).

The PSO DG considered the role of a wider corporate governance framework to ensure the Board is able to maintain its focus on its purpose. In order to deliver this purpose, the Board must be sufficiently informed by the wider ecosystem of which the NPSO is part and to avoid any unintentional groupthink. ***The PSO DG therefore recommends that an End-User Council is established to represent the views of individual consumers, small businesses, charities, corporations, NGOs and government departments.***

To ensure the collaborative nature of the payments industry is maintained and promoted, the decisions taken by the NSPO must also take into account the impact they have on Participants. ***Thus, the PSO DG also recommends that a Participant Council is established to represent the interests of PSPs***.

In order to reach this recommendation the PSO DG considered options for a wider corporate governance framework aiming to propose a structure to facilitate advice from these two groups to inform the NPSO Board.

The options considered included:

- One council to represent End-Users (but not Participants);
- One council to represent End-Users and Participants;
- Two separate councils. One to represent End-Users, the other to represent Participants; and
- One council with two sub-committees focussing on End-Users and Participants

The options were analysed in the context of the recommended option needing to meet the following objectives:

- To ensure the Board has a strong understanding of the issues and concerns of End-Users and of PSPs;
- To effectively manage interaction between the NPSO Board and End-Users as well as the NPSO Board and PSPs on an ongoing basis, in addition to the AGM/EGMs for Guarantors, to ensure the voice of End-Users and Participants are heard; and
- To enable End-Users and Participants to advise the NPSO Board on the general strategic context of payments.

It was agreed that it would be important to have representation for End-Users but also that there was a need for ongoing input from Participants outside of the AGM/EGM and executive committees.

All approaches have merit but ***the PSO DG recommends that initially two separate Councils be created.***

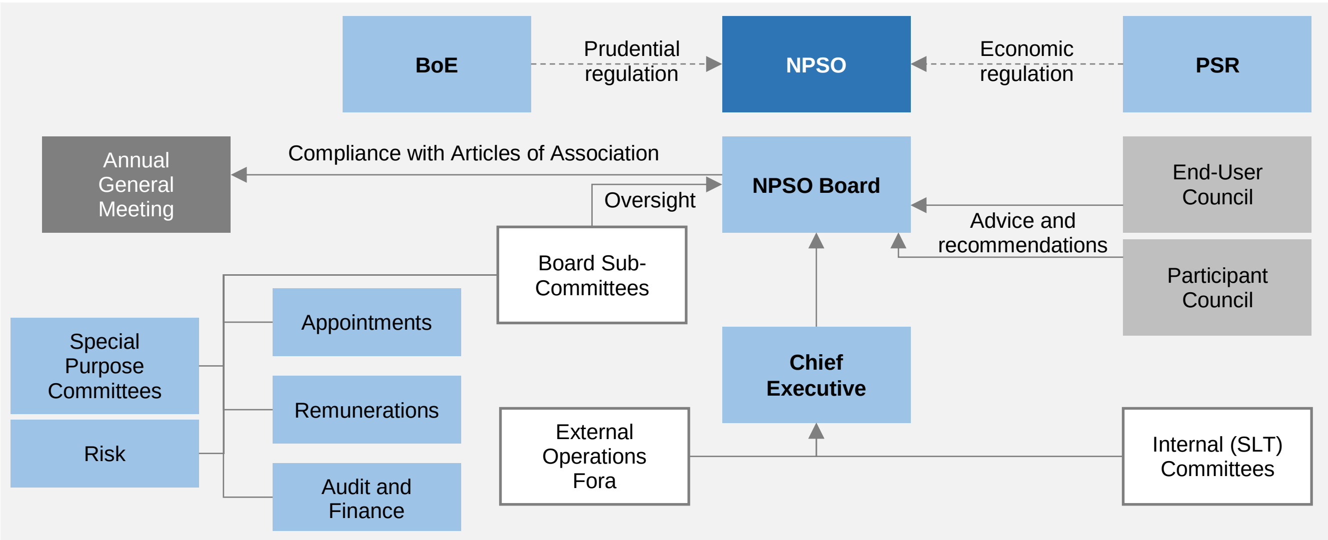
Two separate Councils will enable the Board to hear clearly what the separate voices of End-Users and Participants are, and identify where there is consensus or tension. It will then be for the NPSO Board to reach any conclusions in the context of its purpose and strategic objectives.

It is assumed that the PSR may seek to verify that the Advisory Councils' views have been adequately considered by the NPSO Board in reaching its conclusions.

However the NPSO Board decides to configure the Advisory Councils, the following principles should be taken into consideration:

- The End-User Council and the Participant Council should be independent in their construct and representation, with no (or at least clearly identified) conflict of interest.
- They should have close links with each other to encourage a broader perspective across both groups within the payments ecosystem.
- The NPSO Board should take into consideration the Advisory Councils' view(s) to inform their decision making.
- The dialogue between the Advisory Councils and the NPSO Board should be two way.

Figure 5. **NPSO Governance**



The Advisory Councils should provide independent input to the NPSO Board. The NPSO Board will be responsible for the selection process of Council members.

The Chairs of both Councils will need to be independent should be appointed for their skills and experience in representing their constituent group. There should be attendance from the Councils in NPSO Board meetings, and to this end it may be most efficient for Independent Directors to act as Chairs for each Council.

Where appropriate, representation from the End-User Council would attend the Participant Council and vice versa as non-voting members to ensure informed debate and decision making, reaching consensus on key issues where possible before recommendations are passed to the NPSO Board. Reaching consensus, however, would not be a requirement on the Councils.

The NPSO would fund and provide sufficient secretariat to the Councils to enable them to operate smoothly and function efficiently.

It is anticipated that the Participant Council members and any research they undertake would, generally, be self-funded, unless it is otherwise agreed with the NPSO Board. However an annual budget is likely to be needed, with the approval of the NPSO Board, for the secretariat and the End-User Council. The budget would need to be sufficient to enable the Councils to deliver their responsibilities.

The NPSO Board will need to consider whether it is appropriate to have paid representatives on either the End-User Council or the Participant Council. This is likely to have a direct influence on the nature of representation on the Councils and potentially the degree of commitment from representatives serving on the Councils.

The Councils will need to report annually and publicly on their work and present this to the NPSO Board and PSR. The report may include an opinion on how well the NSPO has delivered against its purpose and strategic objectives.

Precise working arrangements to ensure adequate communication between the Board and the Councils, and appropriate mechanisms for the support of the work of the Councils will need to be put in place.

3.6 Funding

Includes recommendation on new funding model

The funding model that the PSO DG recommends is different from some of the current PSO funding arrangements. Today, the three schemes depend on their Members/ Participants for funding through a combination of transaction-based fees and, for some schemes, calls on Members/ Guarantors[5]. The Boards have limited independence for financial decisions, partly due to the lack of clear distinction between the roles of Guarantor, Board Directors and Participant. In the current model, to become a direct Participant, an entity must also be a Guarantor. In addition, as Guarantors they become Members of the scheme, and so are represented by Member nominated Directors on the Boards. In consequence, there is a strong perception that funding decisions are not made independently by the Boards.

In the new model, it is the intention that there will be clarity between the role of Guarantor, Board Director and Participant. The Board and its directors will therefore have independent control over their funding decisions but will need to explain themselves to Guarantors and seek support of Participants where appropriate.

The PSO DG recommendation is to set up an operating funding model that will continue to be based primarily on transaction fees, but would also give the NPSO the ability to build up surplus funds (for re-investment, not distribution) and be able to seek capital funding for specific development projects from diverse sources (e.g. specific groupings of Participant, users or capital markets). The intention would be to significantly reduce the possibility of unexpected future calls upon Participants for any but the most extraordinary of funding requirements.

The funding model discussed below covers four aspects:

- Initial funding requirements.
- Funding model for ongoing operations of the NPSO.
- Funding for new or additional functions.
- Extraordinary funding.

[5] C&CCC has shareholders, not guarantors

3.6.1 Initial funding requirements

Includes recommendation on how to fund initial requirements

There will be different initial capital funding requirements that need to be covered. The expectation is that these will be for specific purposes relating to the set-up, initial period of operations of the NPSO, and ultimately the transfer of operator responsibilities from the PSOs to NPSO.

1) **Planning**
   These costs are likely to be covered, or have been covered up to date, mainly by the PSOs and include costs such as PSO DG project support and legal fees in relation to Competition and Markets Authority (CMA) filings.
2) **Set-up**
   These include Board and CEO recruitment and the initial set-up and running of the organisation during its first year of operation. (Stages One and Two of the implementation plan – Section 5).
3) **Transfer**
   These relate to how the entities will be transferred, legal and any other costs due at this stage. There will also be a need for an adequate set of initial reserves for the NPSO, which could either be entirely new funding (with existing capital in the current PSOs returned to their members on wind-up), or the existing capital could be up-streamed from the current PSOs to the NPSO on transfer of responsibilities. Any historic liabilities which may crystallise at this point would need to be funded by existing PSO Members prior to transfer.

The initial funding will not be recurring in nature. It is anticipated that the institutions who make up the current PSO membership group would provide this funding.

Consultation with these institutions will be required to establish whether it would be advantageous to them to evidence any capital contribution they make through the issuance by the NPSO of a quasi-capital instrument[6]. The nature of this instrument should be that it is structured in a way such that it can be repaid to the subscribers at some point in time, should the Board of the NPSO determine that it has excess capital. It may be sensible to build in some form of incentive on the Board to repay it, such as a coupon, which would represent a cost to the company.

The Initial Funding Proposal is outlined at appendix 7.3 and covers items 1) 2) and 3) above.

[6] Any quasi-capital instrument would need to refer to PFMI expectations and be as closely akin to equity as possible.

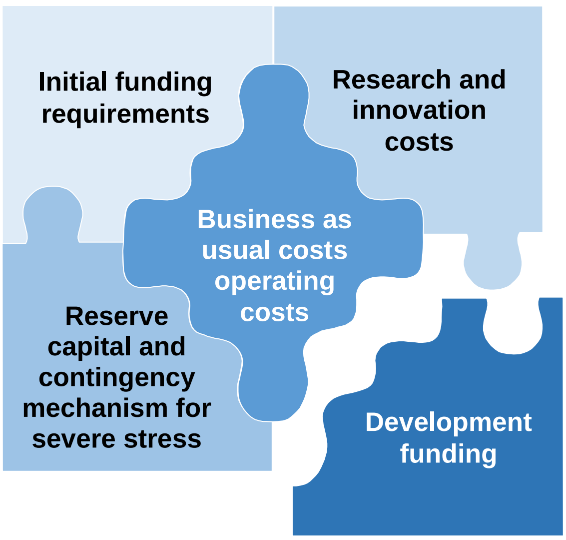
3.6.2 Funding model for ongoing operations of the NPSO

Recommended funding model

Once the initial capital funding requirements have been covered and responsibilities of the existing PSOs transferred across to the NPSO, we expect the NPSO to be self-sustaining. ***It will need to have independent control over the use of its funds and adequate reserves to ensure its resilience from day one to minimise the risk of seeking extraordinary funds from Guarantors or Participants.***

Figure 6 illustrates the five components of the funding model we envisage.

Figure 6. **Components of the funding model**



- **Initial funding requirements**: our assumption is that the NPSO will be adequately funded for its set up (see section 3.6.1 above).
- **Business-as-usual operating costs**: these will largely be funded by transaction fees charged individually for each service it offers to the Participants of each service and based upon cost recovery of the costs associated with each service and a share of overheads of the NPSO.
- **Research and innovation costs**: we anticipate an uplift on transaction fees may be needed to cover research and innovation.
- **Reserve capital and contingency mechanism for severe stress scenario**: ***The PSO DG recommends that the NPSO has at inception adequate capital, and the ability to generate additional capital through the accumulation of surplus.***
- **Development funding**: the NPSO should be able to cover new projects, or specific developments without reliance on a non-specific call or charge on Guarantors or Participants. For this purpose it will need to be able to identify the potential beneficiaries of any developed product or service, and obtain necessary commitments from them to use the developed item, and pay for it by way of specific transaction fees. With such a commitment, the NPSO should be able to access capital markets, or loan funding (or any other avenue the Board may determine to be appropriate) to cover the cost of the development (see section 3.6.4 below).

The PSO DG anticipates that at least 90% of the NPSO's business-as-usual funding requirement would be covered via transaction fees. There is the possibility of having additional up-front and/or annual participation fees, to cover specific NPSO functions such as assurance, but it will be up to the Board of the NPSO to determine if they are necessary and what their quantum should be.

The PSO DG recommends the following principles to clarify the aim these fees would have and what parameters the future Board of the NPSO might want to follow, should it decide to implement them.

- Transaction fees would be transparent as to their calculation and the costs that they would be covering.
- Any upfront participation fee would recognise Participants' commitment and acceptance of responsibility to participate.
- Any annual participation fees would mean Participants re-subscribe to, and affirm continued respect for the relevant rules and standards of the services for which they are a Participant.
- If the NPSO Board opts to charge these fees, in principle they need to be simple, transparent and reflective of the cost.
- The fees should aim at simplifying access requirements and not become a barrier to entry.
- Fees may potentially cover assurance costs and consideration would need to be given as to how they might be tiered according to the type of Participant.
- Future compatibility with access requirements of other initiatives which may at some point be transferred into the NPSO, such as Open Banking should be taken into account.
- Consideration will need to be given to justifiable cross-subsidisation by the Board and in the Articles of Association.

These are suggestions for the future NPSO Board to consider, when deciding on a funding model with the intention to minimise the need to call on the industry for extraordinary funding, which would allow the NPSO to fulfil its purpose and strategic objectives. An indication of the magnitude of the business-as-usual costs (for the period while there remain three separate payment systems) is given by understanding the functions currently undertaken by each of the three schemes, and how the existing functions might need to be consolidated, enhanced or expanded (see Section 3.7).

3.6.3 Funding for new or additional functions

The funding model described above does not consider additional functions or initiatives that may be taken into the NPSO at a future date. We suggest that the future Board of the NPSO should conduct adequate diligence whenever deciding on whether to take on an additional function or initiative. This should include assessment of risks and funding needs, including demonstrating no new burdens or risk to resilience of the retail payment functions of the NPSO.

It is recommended that any future additional functions should not be transferred into the NPSO, unless their funding needs are specifically quantified and how they will be covered is clear. In principle, those who will use or benefit from the service should be the ones paying for its cost. The services provided by the NPSO must not be put at risk by any additional function, and resilience will remain a key priority.

3.6.4 Development and/or extraordinary funding

There are three general scenarios in which this funding may be required:

- When there is a need for development of a new capability in the core services either for the End-User and Participant base as a whole or for specific categories of End-User or Participant, or
- When a particular risk becomes so significant that it demands a major modification to the core service, or
- When a significant unforeseen circumstance occurs which requires a systemic response.

It is the intention that the company's reserves can act as a liquidity buffer and enable the raising of funds to be from additional Participant fees rather than capital raising. However, should the need arise for extraordinary funding in the future, under any of the above scenarios, it may be necessary for there to be mechanisms in place which may involve some form of loan, or capital instrument (rather than a call on Participants). Participants may be the sole or the majority subscribers to the new loan or capital instrument. Guarantors will not be a source of extraordinary funding, as their liability will be limited to the amount of their guarantee, which is only due in liquidation.

The intention will be that any new development or project, will be paid for by those most interested in it. If a new product is being developed, (or a new risk needs to be mitigated) for which the Board of the NPSO determines it will need to raise funding, it will identify potential sources of funds, including vendor finance, lenders, private equity and others. To provide these funders with a business case, it will be necessary to approach those who will see the benefits of the new product or risk initiative. This will also serve as a mechanism of control, as the NPSO is unlikely to be able to raise funding for any new projects unless it can clearly identify the resulting benefits to the End-Users or Participants.

Where a development need has been evidenced by one or other of the Advisory Councils, it will be up to the Board to respond with a development funding proposal through which it could deliver a solution to the identified need.

Some development needs identified by the End-User Council, or indeed the Participants Council, may not have an immediately, commercially viable business case but may for instance, offer certain societal benefits. It is in these circumstances that the NPSO Board will need to balance its approach to funding with its purpose and strategic objective, to determine the best course of action.

In extremis it is likely to be the case that the major institutions who are providing the majority of the transaction volumes through the NPSO's systems would need to respond as lenders of last resort. However, if the funding model above is effective an in extremis situation should genuinely be the last resort and not the first resort as may have been the case in the past.

3.7 Functional/ operational capabilities

Recommendations on a three-stage process on how to integrate the functional and operational capabilities of the existing PSOs into the NPSO are outlined in this section.

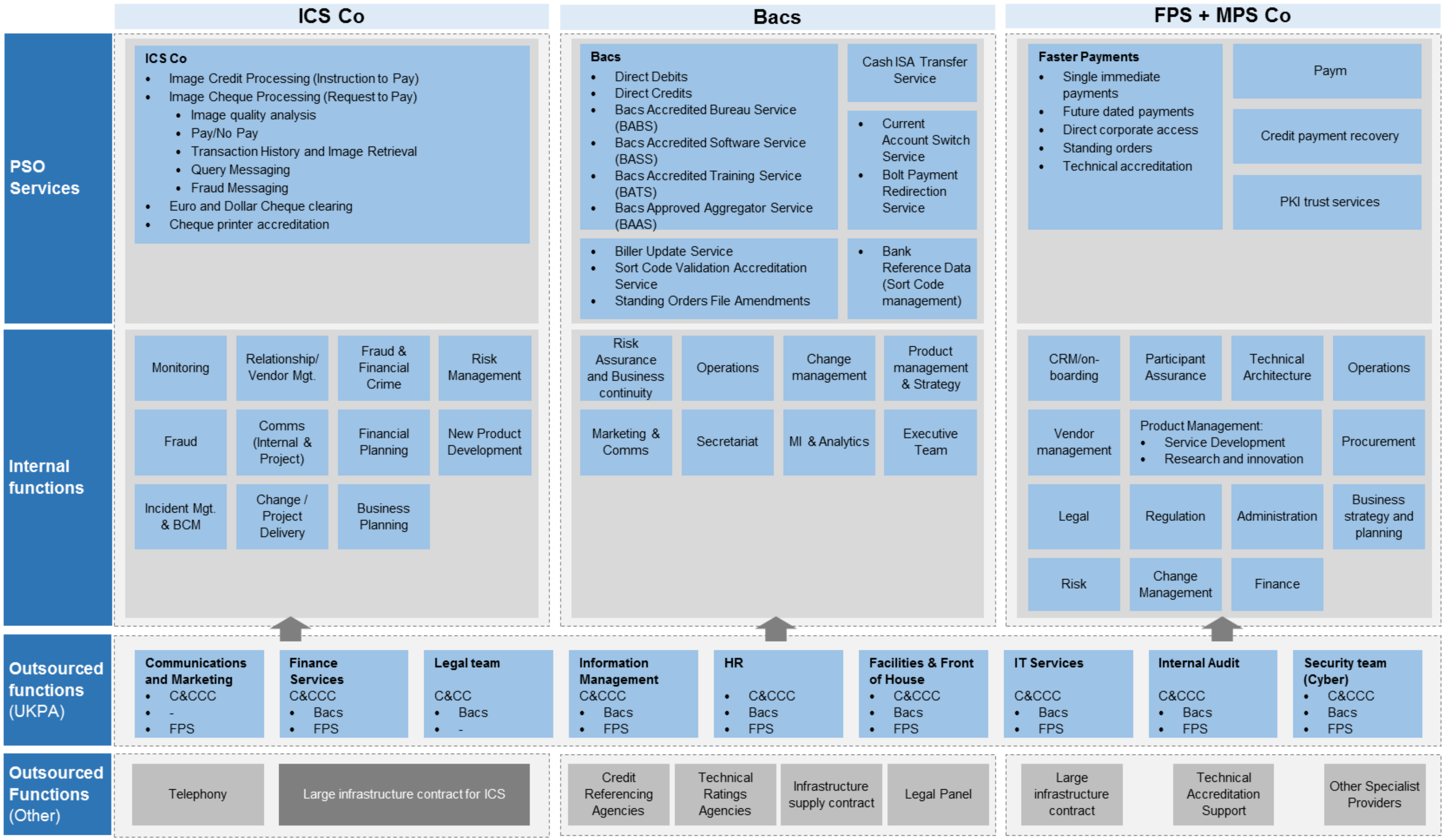
The PSOs are currently responsible for providing essential services to the UK payment ecosystem, supported by a combination of internal functions, and outsourced functions. In the case of Bacs and FPS, their current state functional model helps illustrate what their initial functional model will be under the NPSO. ***The PSO DG recommends that a three-stage integration process be adopted to achieve the consolidated entity.***

The impact on functions and operational capabilities this process would have are explained below (the legal considerations relating to Guarantors and ownership are explained in section 5):

1. ***Stage One:*** NPSO Hold Co would be created. Bacs Limited and FPS Limited would become wholly owned subsidiaries of the NPSO (It is understood that MPS Co is likely to become a wholly owned subsidiary in FPS). Their existing services, internal functions and outsourced functions would remain unchanged. At this point, the new ICS Co may be created concurrently as a wholly owned subsidiary of the NPSO. If this is the case, the PSO DG agrees that it would make sense for it to outsource (to C&CCC) the operations of the ICS project until such a time as it has the necessary resource and capabilities in place.
2. ***Stage Two***: NPSO Hold Co would have its Board and management in place, who will begin the process of integrating and/ or expanding any duplicated functions they deem appropriate. These are likely to initially include functions such as strategy, finance and legal and the development of a common risk framework. The PSO DG is not recommending any particular order for this, as it will be for the Board and management of the NPSO to determine the precise sequence of events to be followed.
3. ***Stage Three***: During this stage, system operator responsibilities would be transferred, in a phased approach, from each of the existing PSOs to the NPSO, once there is evidence that such a process would increase resilience and efficiency, and that the schemes, or indeed the ecosystem, will not face any unnecessary or excessive risk in so doing. This stage will require agreement of the relevant PSO Board, the NPSO Board and relevant regulators.

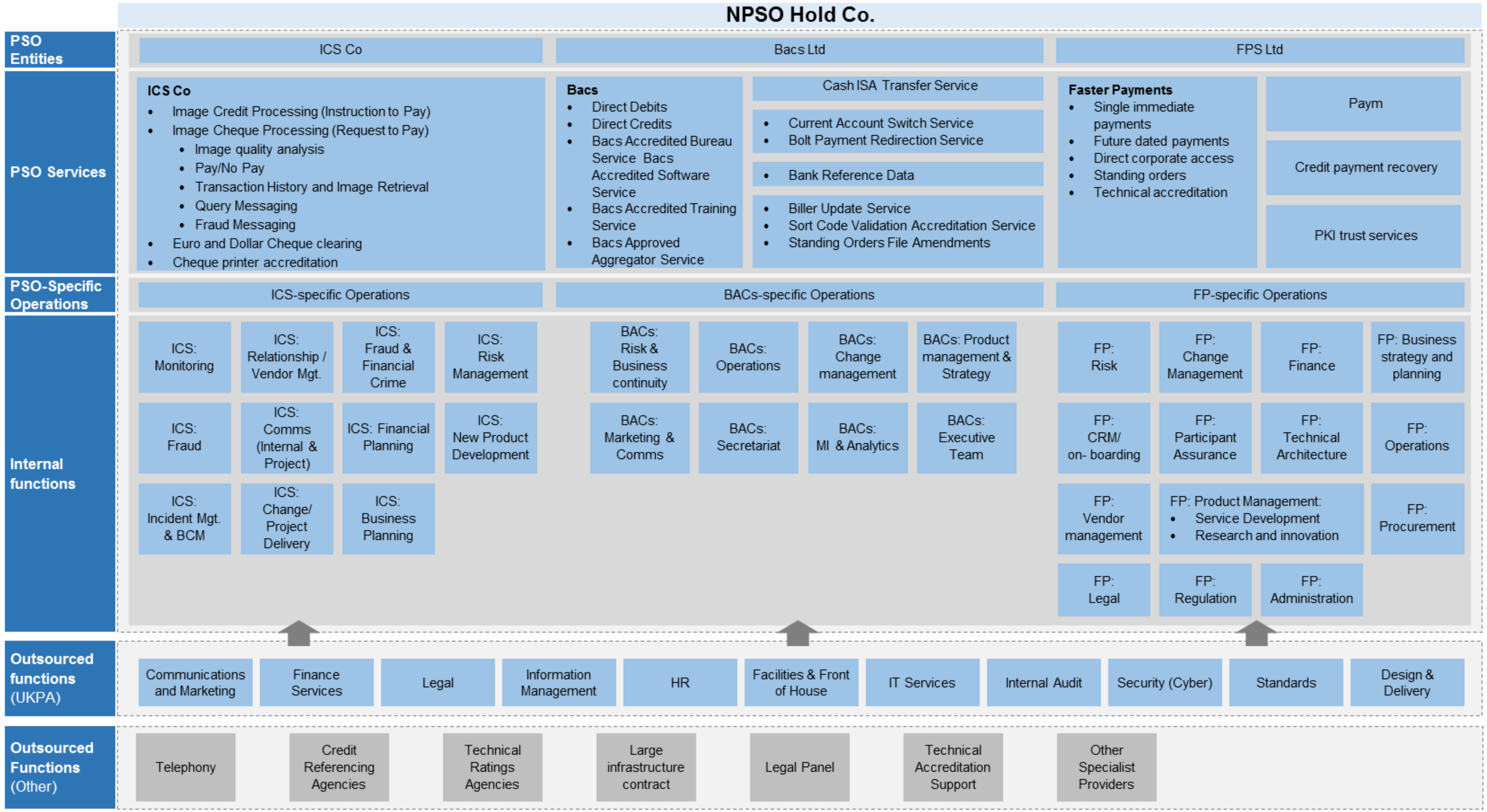
Figure 7 offers a detailed view of the current state functional models for Bacs and FPS, and what the PSO DG believes to be an approximation of the functions the new ICS Co would have for Stage One.

Figure 7. **Current state functional model for Bacs and FPS, and likely functional model for ICS Co**



At the end of Stage One, the three companies would have become wholly owned subsidiaries of the NPSO. This means that the functional model would be able to progressively evolve towards a consolidated state functional model.

Figure 8. **Functional model at the end of Stage One**



During Stage Two, the Board of the NPSO would be able to begin to integrate some of the internal functions, but would, most likely, keep the separate contracts for the outsourced functions in place. It will be at the discretion of the Board of the NPSO exactly where and how to start, but it is reasonable to presume that it would aim for a substantial level of integration by the end of December 2017, with regards to functions such as Strategy, Finance and Legal, and the development of a common risk framework. For this to be the case, the expectation is that the design of these consolidated functions would be complete, even if the transferring of staff or other contracts is not. Secondments (from existing PSOs to the NPSO) may be needed for this to be achieved, but changes to the underlying employment contracts may not be necessary at this stage.

Additional activities could be initiated during Stage Two (for completion during Stage Three). These are likely to include the design of the NPSO's future state TOM, along with the following considerations:

- **Sourcing decisions:** Sourcing decisions (e.g. in house / outsourcing decisions) have not been specified in these functional models. The working assumption is that the sourcing model used in the current state would remain unchanged until the NPSO Board make decisions otherwise.
- **Expanded functionality:** The NPSO is likely to need to expand functionality / build out certain capabilities in order to meet the purpose and strategic objectives set out in the NPSO's Strategic Framework. These will need to be included in the design of the TOM.
- **Staffing:** Future staffing (and headcount allocation across both the combined and expanded functions will need to be analysed and planned for during Stage Two).
- **Outsourced Services:** The assumption throughout these functional models is that there would be no initial service consolidation from the outsourced suppliers of these services. However, during Stage Two it is envisaged that the management and Board of the NPSO would wish to determine the optimum arrangements for these services for the future, and the possibilities for synergies between internal functions and outsourced functions identified. The major infrastructure outsourced services will be the subject of extensive procurement work by the NPSO and current contracts will remain unaltered.
- **Legacy process and system decommissioning:** It is envisaged that, during Stage Two, the design of the future state TOM and related processes will be designed. This may identify legacy processes and systems that may no longer be required and which can be discontinued.

Although not the primary driver for consolidation it is expected that the Board of the NPSO will be able to identify and realise synergies in administration and deliver the challenging portfolio of work that is envisaged in the PSF initiatives more efficiently, and more cost-effectively than is possible with a three company model.

4 Stakeholder Rationale

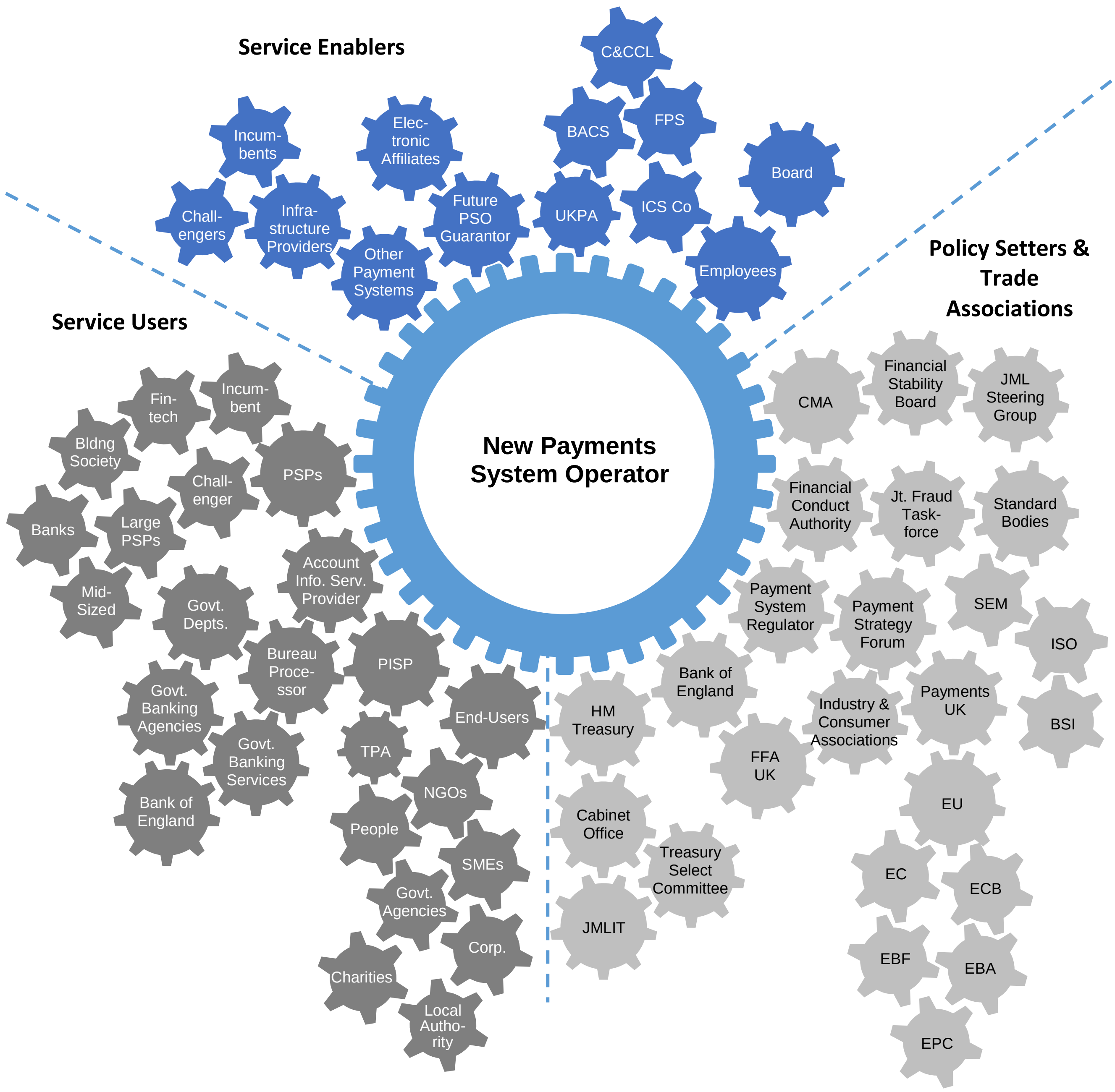
The payments ecosystem of the UK is comprised of a large and varied group of stakeholders with distinct needs. Service users (End-Users and Participants) including individuals, businesses and government are only a subset of this ecosystem. However, such users, and the need for the industry to be able to continue to serve their evolving needs were the central focus of the strategy outlined by the PSF. The NPSO in its purpose and strategic objectives will continue this strong focus on service users. This section sets out how the NPSO, when set up along the lines described in the previous sections, will address the needs of the complex UK retail payments stakeholder ecosystem and what successful delivery by the NPSO of its purpose and strategic objectives would look and feel like across the UK payments ecosystem.

4.1 Stakeholder ecosystem

There are many parties involved in enabling, initiating, processing, and receiving payments across the UK economy. The users are those that initiate, or receive payments. There are also those who enable the payment to be made, such as PSPs, as well as infrastructure providers who support the payments' platforms and other technical infrastructure necessary to ensure a payment reaches its intended recipient. As, overall, this whole ecosystem is systemically critical to the smooth functioning of the UK economy, there is considerable oversight exercised by regulators, trade associations and government. All of the people behind these entities, such as employees, management and governance bodies are part of the payments ecosystem as well. To help navigate it, we have categorised stakeholders into one of three groups, as shown on figure 9:

- Service enablers: distinguishing between "internal" and "external" service enablers.
- Service users: being all those who use the services provided by the NPSO, distinguishing between End-Users and PSPs.
- Policy setters and trade associations, including regulators.

Figure 9. **NPSO stakeholder ecosystem**



- ***Service Users***. Service users are viewed from the perspective of those who use the services provided by the NPSO (and its subsidiaries), and are divided into two distinct categories:
  - ***End-Users***. All those who initiate or receive payments are considered within this category, including individual consumers, small businesses, charities, corporations, NGOs and government departments.
  - ***Payment Service Providers***, of all types, including direct, indirect, and aggregators, who provide their payment services to End-Users which are overlaid onto the core service provided by the operator(s).

- ***Service Enablers:***
    - ***Internal service enablers*** are the staff within the NPSO, its subsidiaries (namely the existing PSOs) and shared service providers (e.g. UKPA). “People” are all those who make up the Board(s), management and staff who will bring to life the purpose and strategic objective set out previously.
    - ***External service enablers*** are those corporate entities which continue to work in close collaboration with the NPSO as Guarantors, platform providers and other payment systems in the UK and internationally.
- Finally***, policy setters and trade associations*** include regulators who directly oversee the payments and financial markets infrastructure, and those organisations who represent industries, consumers and other important stakeholders.

4.2 Stakeholder perspectives

The stakeholder groups described in the previous section do not necessarily have the same needs, and will therefore, at times, have conflicting expectations of, and demands on, the NPSO. It will be the job of the Board to ensure a balance is met, and that the benefits are not skewed towards one group, but to maximise the benefit for all stakeholders, within the overall payments ecosystem. An initial view of what the NPSO, in achieving its objectives, will provide for each of these groups of stakeholders is discussed below.

4.2.1 Service Users

As the NPSO establishes itself, it will be critical that it maintains an open and effective dialogue with all service users. The End-User perspective will be improved within the NPSO as envisaged, as it will have an integrated overview of the service provision across all retail payment systems. The need to maintain a collaborative and coordinated industry including PSPs and the extended provider community will also be enhanced so that the benefits of strategic alignment and cost management end to end across the payment network is considered at all times.

Table 2.1. **Impact for End-Users**

Relevant strategic objective	What the NPSO will deliver for this group	How will the NPSO deliver it?
Robust and Resilient	Safe payments services	Continued focus of existing PSO teams and underlying infrastructure provision to maintain high quality service record. The rules of participation will be maintained to protect all service users and society at large.
	Uninterrupted payments services	The transition process will ensure transfer only occurs when the NPSO is ready to take full responsibility for the schemes. The imperative will be to ensure that whatever changes might be introduced to improve payment services, they will be done in such a way that does not interrupt or increase risk to the reliability and timeliness of existing payments services.
	Sustainability	The NPSO will have a strategic imperative to continue to provide a sustainable, secure and robust infrastructure ensuring the integrity of payments over a medium to long term time horizon. The ability to procure and transition to the NPA will be a core responsibility of the NPSO.
End-User Focused	End-User Advisory Council and Participant Council	The End-User Advisory Council will ensure the End-User has the ability to advise and raise issues with the board of the NPSO. The Participant Council will ensure end to end issues are addressed and the End-User is always considered. They will have an ability to exert pressure through public and regulatory intervention to ensure their voice is heard. This Council will aim to be inclusive of all End-User perspectives, from the largest to the smallest users in the payments eco-system.
	Integrated functions	Combining the three PSOs will give greater clarity on the delivery of End-User requirements, with a single focus and improved coordination of development of new services. End-Users will be involved in the improvement and development of services throughout the process.
Agile & Innovative	Innovative payments services	The NPSO will build out its research and innovation capability in order to be proactive towards the new and evolving (and potential) needs of End-Users. Initiatives such as new access models and collaboration with other initiatives such as Open Banking, will enable competition in banking to be enhanced with respect to payment services.
Accessible	Simpler on-boarding and increased access to core PSO services	Improved access for a greater variety of PSPs will increase the availability of new products and services, increasing competition for payment offerings and providing a wider depth and range of services for the End-User.
Efficient	Reduced overheads and improved coordination of initiatives	Improved efficiency and cost improvements will enable new services to be developed faster and provided at less cost. This will improve services and their costs to the End-User.

Table 2.2. **Impact for PSPs**

Relevant strategic objective	What the NPSO will deliver for this group	How will the NPSO deliver it?
Robust and Resilient	Safe payments services	Continued focus of existing PSO teams and underlying infrastructure provision to maintain high quality service record. Rules of participation will continue to ensure protection of the integrity of the Participant community as a whole.
	Uninterrupted payments services	Reliability of payments services will be maintained, with a co-ordinated view across all three retail payment systems. The moves to create a single Payment System Operator will be designed to ensure that there would be no disruption of the integrity of the underlying payments processes. Transfer only occurs when the NPSO is ready to take full responsibility for the schemes
	Sustainability	As in table 2.1 above. Additionally, the NPSO by having a longer term strategic focus should be able to give the whole Participant community a sense of direction against which they can plan and develop their own service offerings.
Agile & Innovative	Innovative payments services	The NPSO will build out its research and innovation capability in order to achieve the NPSO's purpose and strategic objective of being at the forefront of the global payments industry with competition enabled both upstream and downstream.
Accessible	Participant Advisory Council	The Participant Advisory Council is intended to provide a mechanism whereby the NPSO can gather advice and listen to all Participants to ensure that the core services provided by the NPSO (and its subsidiaries) continue to evolve. This council will provide a forum where development plans can be discussed, to identify their potential benefits and drawbacks. Importantly it will help to work through the industry-wide implications and costs of proposed developments, and also to identify the level of appetite for a proposed system enhancement. This should provide an important check and balance on the NPSO.
	Greater alignment of on-boarding processes	The NPSO will oversee the continuing ISOCC Common Participation Models Project (which includes Link and CHAPS) to align, as far as possible, the on-boarding process for new Participants to the schemes (the criteria and assurance required on each new Participant, however, will not be reduced). The NPSO will speak with one voice across retail payment systems it oversees, and will look to further the development of the common rulebook and standards.

4.2.2 Service Enablers

Table 2.3. **Impact for internal service enablers**

Relevant strategic objective	What the NPSO will deliver for this group	How will the NPSO deliver it?
Efficient	Opportunities to collaborate and influence	The development of new systems, or market opportunities, will be done in collaboration. There should also be a greater opportunity to share existing knowledge and create economies of scale. Speaking with a unified voice across all of the retail payment systems will enable management and staff of the NPSO to collaborate with, and speak with authority to, European and global payment systems as representatives of the world-leading UK retail PSO.
	Enhanced corporate governance	A revised ownership and Board structure with broader skills and experience will enable the NPSO to be a catalyst for new industry initiatives whilst maintaining the focus on security and safety across the stakeholder community. It will no longer be perceived as operating in the interests of any particular group.
	Vision and strategy - Strategic Framework	Strategic alignment across PSOs will enable a longer term, proactive stance to be taken towards strategic development of the NPSO, for the benefit of the entire payments ecosystem. This will create an exciting and challenging environment for all people engaged within the NPSO (and its subsidiaries) to be a part of this essential core economic service.
Excellent People	Combined culture & values	A shared purpose among the people within the three currently separate schemes.
	A critical part of the payments industry	Enhanced ability to shape the industry they have years of experience in, with improved resources and greater coordination.
	Greater scale brings more opportunities, attracts excellent people	The NPSO will be a larger endeavour than the existing PSOs. This will bring new types of challenges and possibilities and improved career paths which should enhance its ability to attract and retain staff.
	Leadership - NPSO Chair, CEO & Board	An open and independent leadership selection process for Chair and CEO will demonstrate that the best people for the jobs have been selected: they should rapidly gain the support and trust of all the staff of all the PSOs, irrespective of where they have come from, whether from outside or within the current PSOs. This will establish a merit based organisation, recognising the qualities the existing organisations already have as well as introducing new ideas.

Table 2.4. **Impact for external service enablers**

Relevant strategic objective	What the NPSO will deliver for this group	How will the NPSO deliver it?
Efficient	An integrated strategy	Strategic alignment across PSOs will enable greater collaboration with, and strategic direction for, all of the external service enablers (as well as with the broader payments ecosystem).
	Simpler landscape, speak to NPSO (one entity) not three	Easier to understand, access and benefit from the relevant services for PSPs of all forms.
	Improved funding model	Open, transparent approach so that only services consumed are paid for. The NPSO will have income available to spend on innovating and maintaining the high level of services expected. A separate approach to capital funding for development of new services should help to ensure no one community pays for another.
	Enhanced strategic capabilities e.g. Research & Innovation capability	The combined capabilities for strategy, research and innovation can build on past success and corporate know how and collaborate further without the current potential duplication of effort that has had little End-User benefit.
	Competitive procurement	The NPSO will be able to assume a unified voice and statement of requirements for platform provision, creating the opportunities identified in the PSF strategy for increased competitive tendering for platform provision services.

4.2.3 Policy Setters and Trade Associations

All of these benefits described above will be dependent upon a robust and resilient infrastructure, within a competitive payments ecosystem, which is vital for the UK economy. The successful delivery of these benefits will be a top consideration for policy setters and trade associations.

Table 2.5. **Impact for policy setters and trade associations**

Relevant strategic objective	What the NPSO will deliver for this group	How will the NPSO deliver it?
Robust & Resilient	Greater scale and simpler oversight	Single senior interface with the potential for a single risk framework will enable a more consistent focus on security and resilience. Enhanced capabilities through greater strength and depth of resource at the NPSO.
Efficient	More joined up view	Consolidated assurance capabilities will enable the full breadth of potential service providers to be assessed and assurance models developed in a simpler more coordinated manner.
	Simpler landscape, speak to NPSO (one entity) not three, engage on industry-wide projects	Industry-wide initiatives requiring collaboration will be easier and less complex in terms of strategic alignment. There will be one retail payments entity, one Board and one set of Guarantors to deal with as opposed to three of them.
	Enabling competition through increased and simplified access	As the NPSO's purpose and strategic objectives aim to simplify and increase ease of access, develop a broader range of services and remove duplication, improved competition amongst both PSPs and platforms should be enabled.

It is clear that for this positive impact upon the UK payments stakeholder ecosystem to be delivered, there is important work to be done by the NPSO. It should be acknowledged that this cannot all be delivered from day one. Some of the impact will be more immediate than others, however, these initiatives will all be working towards the achievement of the NPSO's purpose and strategic objectives. The proposed timeline and the mechanics of how this will evolve are detailed in our next section on implementation.

5. Implementation

Includes recommendations on the implementation plan and transition process.

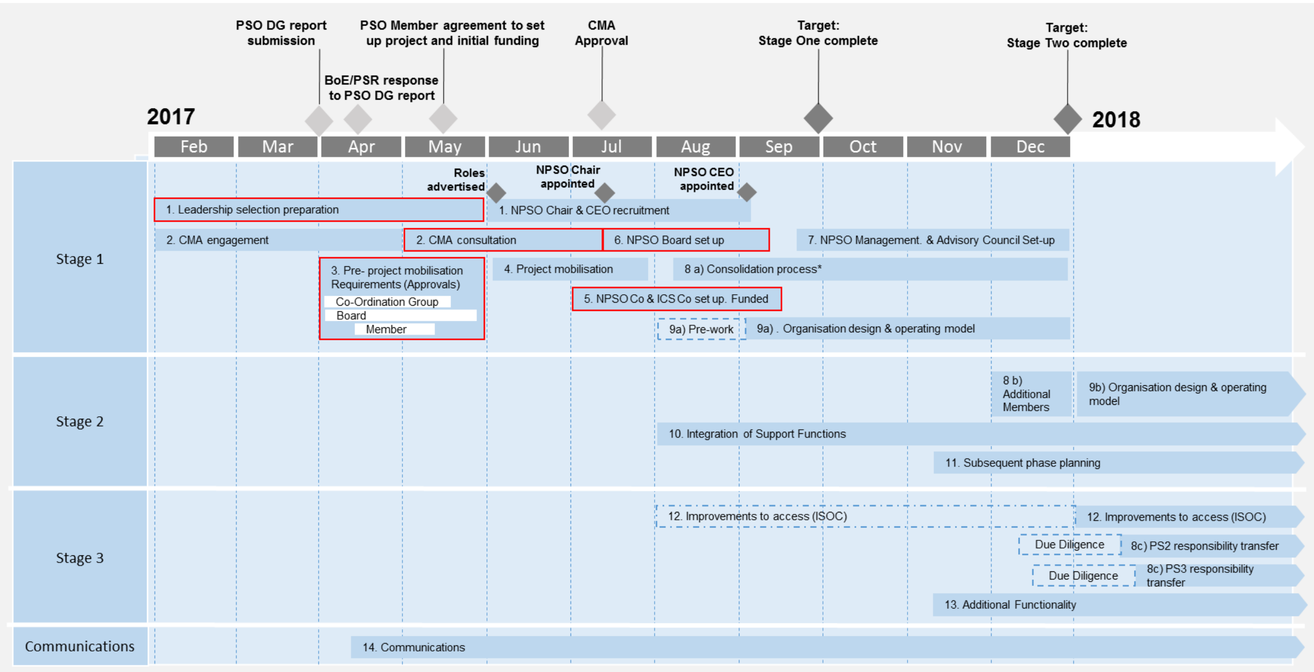
The PSO DG envisages that the NPSO will not only maintain but enhance the current position of the UK as a world leader and pioneer in retail payments. All of the benefits of consolidation may not happen from day one. However, there are certain immediate benefits for the industry, especially in terms of improving the coordination of work and speed of implementation of the PSF initiatives, particularly the NPA, and eliminating some of the duplication of effort across the current three PSOs. The recommended implementation plan set out in this section seeks to maximise these early stage benefits and move steadily towards higher levels of integration through the proposed three-stage process described in section 3.7. This process will bring with it certain risks, and the PSO DG has recognised them and provided recommendations in terms of mitigating strategies for this purpose. Finally, recommendations are provided for the key activities to be completed in each stage, relating to governance and management, as well as to delivery principles.

5.1 High level roadmap and critical tasks

Recommended high level roadmap for implementation plan.

The high level roadmap for the consolidation and creation of the NPSO requires critical bodies to approve the plan before it can go ahead and finalise Stage One, by the end of which Bacs, FPS and the new ICS Co would be wholly owned subsidiaries of the NPSO. Once this stage is complete, the subsequent two stages may begin. During Stage Two, design of consolidated functions such as strategy, finance, and legal would be finalised and work towards their integrated state will have begun. Finally, during Stage Three, the transfer of operator responsibilities from the PSOs to the NPSO would be completed. Figure 10 below illustrates the likely sequence of events and the critical tasks that form part of the recommended implementation plan.

Figure 10. **Implementation plan – likely sequence of events**



Key: *During this stage, the Membership of BPSL and FPSL will change such that the PSOs become subsidiaries of the NPSO Hold Co. = Approval milestone = Other milestone = Level 1 activity on critical path

5.1.1 Leadership selection process

Includes recommendations on how to take forward the leadership selection process already started by the PSO DG.

The PSO DG has initiated a leadership selection process for the Chair and Chief Executive Officer of the NPSO, as it could take time to complete and it is on the critical path of the implementation plan. It has been agreed that it is crucial for this process to be as open, fair and transparent as possible. A set of documents has been prepared for those who will be taking this process forward.

By the time this report is issued, the PSO DG will have selected a recruitment consultant with recent experience in recruiting for senior positions the PSO DG believes to be relevant. In addition to this, the PSO DG has produced a briefing pack for discussion with the recruitment consultant, along with role descriptions for the Chair and CEO, a Board competency matrix and the recommended leadership selection approach. Given the sensitive nature of some of the information contained in these documents, they are not included in this report.

It is the intention that a selection panel of independent people will be appointed to conduct the interview and final selection of the candidates put forward by the recruitment consultant. In order for this selection panel to be viewed by the industry as open and transparent, the PSO DG believes it should comprise independent panellists, as well as panellists with sufficient knowledge of the industry. This will enable the selection panel to identify the right skillset required for each leadership role. The size of this panel is likely to be between three and five members. Once the Chair has been selected, the Chair will also be a part of the panel and involved in the recruitment of the new CEO.

It is intended that the leadership selection process will be primed and ready to proceed as soon as the necessary conditions precedent to the formation of the NPSO have been completed.

5.1.2 Conditions precedent to the initiation of Stage One

The following are deemed to be the necessary conditions precedent to the formation of the NPSO, which is the first step in Stage One of the Implementation Plan.

The essential conditions precedent are:

- The support of the PSR/BoE Coordination Group (CG).
- The agreement to the plan by each individual Board of the PSOs.
- The agreement of the Members/ Guarantors of the existing PSOs to give up their membership in the existing PSOs, and to becoming Guarantors of the NPSO.
- The commitment to provide the initial funding of the NPSO from the institutions who are the current Members/Guarantors/Participants of the PSOs.
- The receipt of CMA approval (or non-objection).

The CG is likely to be focused on resilience and on the NPSO achieving the objectives set out by previous reports, including the PSF strategy and the PSO governance reports. The PSO DG is reasonably confident these criteria will be satisfied as throughout this whole process, the observers representing the PSR and the BoE at the PSO DG meetings have offered their respective views in this regard, and the PSO DG has taken their observations into account with respect to the mitigation of risks to the system and ensure resilience, as well as to maximise the competition benefits from consolidation.

The Boards of the PSOs have a duty to their Members, and must act in the best interests of their company, as well as the public interest. To this end, the PSO DG has held briefing events with current PSO Members. These events have provided valuable input which has helped shape the recommendations outlined in this document. The PSO DG believes it is aware of the main concerns and risks identified by the different stakeholders. A list of the key consolidation risks and their recommended mitigants are set out in section 6.

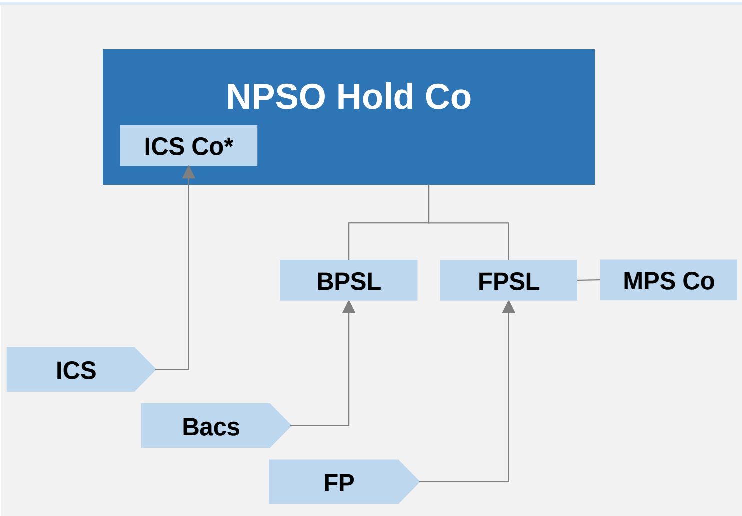
In terms of timelines, given the dates of Board meetings, the time it will take the CG to provide any feedback on this report, and the periods needed for Members' internal approval, the PSO DG believes that the most of the necessary approvals (or non-objections) should be received before the end of Q2 2017.

5.1.3 Consolidation and integration process

Includes recommendations on the necessary steps to achieve full consolidation and integration

Once the conditions precedent have been met, the selection process for the Chair and CEO can conclude, and the three stage consolidation process can commence, commencing with the creation of the NPSO Hold Co, the simultaneous creation of ICS Co within the NPSO Hold Co, and subsequently Bacs and FPS can become wholly owned subsidiaries of the NPSO, as detailed in figure 11.1.

Figure 11.1. **Stage One**



- ICS Co will be created as a wholly owned subsidiary of the NPSO Hold Co ab initio.
- Bacs Limited and FPS Limited will remain in place as companies (It is assumed that MPS Co will be acquired by FPS prior to, or as part of Stage One)
- The respective PSO Boards will continue in existence for as long as is required.
- The Payment Schemes (PS) will be operated from within the PSOs which will be wholly owned subsidiaries of the NPSO Hold Co.
- In the case of ICS Co, it will outsource its operations to C&CCC, which will also continue to be responsible for ensuring the interests of BBCCL in the development of ICS Co.

The steps required for this stage to be deemed complete are likely to be as follows:

1. An interim NPSO Board will be required.
2. Articles of Association drafted to allow a variety of funding mechanisms.
3. Delegated authorities updated.
4. Funding commitments in place.
5. NPSO Hold Co created.
6. Chair and initial Board appointed and in place.
7. CEO of NPSO appointed.
8. Initial tranche of funding for Stages One and Two brought into the NPSO.
9. Existing Members (Guarantors) of PSOs must resign their status from the PSOs and in return subscribe as Members (Guarantors) of the NPSO.
10. Participant/membership documentation (including scheme rules) for existing PSOs will need to be modified to enable continuity of participation in the payment schemes under the new holding company structure.
11. The NPSO Hold Co would be admitted as the sole Member of the PSOs limited by guarantee.

The PSO DG anticipates the following impact on different stakeholders at this stage:

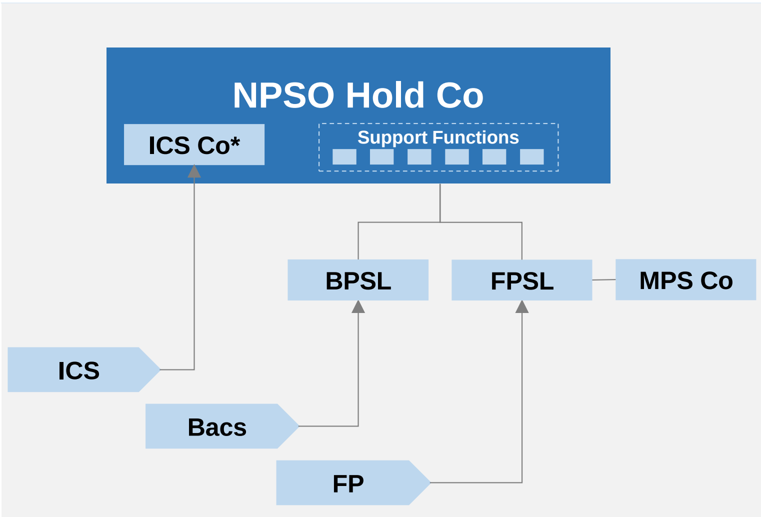
- **Suppliers:** Minimal changes to underlying supplier contracts. Contract changes may be required where there are change of ownership clauses.

- **People:** No need for changes to underlying contracts.
- **Retail Payment systems:** No change to retail payment systems or services.
- **Functions:** No integration of functions.

By the end of Stage One, some of the benefits of one single entity will begin to bear fruit. Information sharing will begin to flow more openly due to the three entities being part of the NPSO "group". At this stage, business as usual will continue, and there will be no increased risk to resilience because the rulebooks and resilience processes of the existing schemes will remain in place. There will be reserved matters for the Board of the NPSO, though the existing Boards will keep their system operator responsibilities.

Following completion of Stage One, which the PSO DG expects will be by end of September 2017, further integration of functions can start, which will move the NPSO into Stage Two of the consolidation process, as shown in figure 11. 2.

Figure 11.2. **Stage Two**



- Bacs Limited, FPS Limited will remain in place as companies.
- The respective PSO Boards will continue in existence for as long as is required.
- The Payment Schemes (PS) will be operated from within the PSOs which will be wholly owned subsidiaries of the NPSO Hold Co.
- In the case of ICS Co, it will outsource its operations to C&CCC, which will also continue to be responsible for ensuring the interests of BBCCL in the development of ICS Co.[7]

The steps required for this stage to be deemed complete are likely to be as follows:

1) Additional Members assume Guarantor rights in the NPSO.
2) Integration of support functions to support the Board (including strategy, procurement and finance).
   a) PSO employees may be seconded to these functions.
   b) NPSO Implementation Project work streams enable this consolidation of support functions.
   c) Secondment agreements will be put in place between the PSO subsidiaries and NPSO Hold Co, with individual agreement between the secondee and their PSO.
   d) Initial stages of consolidation of frameworks (e.g. risk framework).

The PSO DG anticipates the following impact on different stakeholders involved:

- **Suppliers:** Minimal changes to underlying supplier contracts. Contract changes may be required where there are change of ownership clauses.
- **People:** Potential TUPE liabilities could apply at this stage. Careful consideration needs to be given to the duration of secondments, the plans for secondees at the end of the secondments and how this is communicated.
- **Retail payment systems:** No immediate need to change services.

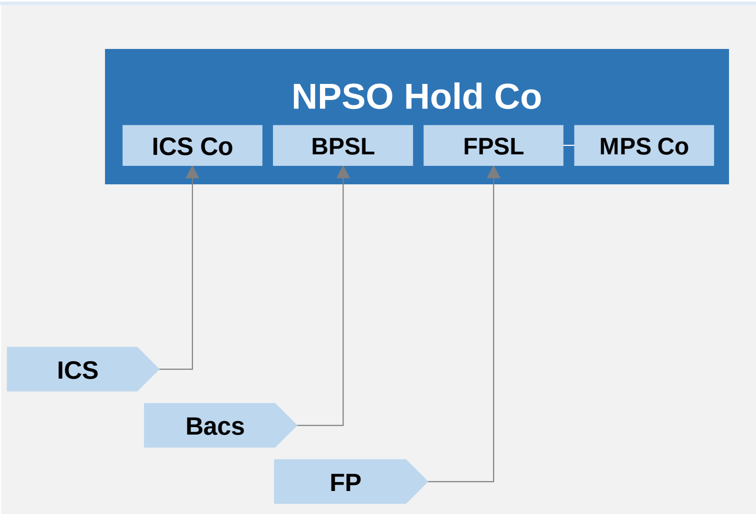
[7] At this stage it is not known how the implementation of ICS Co. within the NPSO structure will evolve.

- **Functions:** Some integration of functions.

By the end of Stage Two, anticipated to be by the end of December 2017, more of the benefits in relation to knowledge sharing and enhanced capabilities will begin to bear fruit. The initial consolidation at the top level of the functions will begin to enable projects to be directed at an NPSO level, co-ordinating between the PSOs, with less duplication of effort and less restrictions.

Once this stage is complete, and the NPSO is in place to take on the system operator responsibilities from the PSOs, the transfer will begin, which is Stage Three.

Figure 11.3. **Stage Three**



- Sequential transfer of business or scheme of arrangement.
- Responsibility for the operation of the Payment Schemes (PS) is transferred to the NPSO Hold Co.
- Sequential consolidation of internal functions takes place.
- The NPSO Board will determine whether the original PSO entity may need to remain in place. At this stage, the assets and liabilities may or may not be transferred into the NPSO (if not they may be retained or returned to members in an orderly wind-up). Each PSO Board has a decision to keep the corporate vehicles of the PSOs, if required. (Reasons for existing entities to remain in place may include: For holding underlying contracts, for tax purposes, long-term and uncertain liabilities or for other reasons).

The steps required for this stage to be deemed complete are likely to be as follows:

1) Corporate design completed.
2) Service and function integration plan finalised and progressively implemented.
3) Transfer of responsibility as payment system operator from:
   a. PS1: From PSO1 to NPSO.
   b. PS2: From PSO2 to NPSO.
   c. PS3: From PSO3 to NPSO.
4) Implementation of service and function integration.
5) System operator responsibilities transferred into NPSO.
6) Additional or expanded functions and their integration will have been planned for.
7) Legal steps to effect the asset and liability transfer and consideration of company law issues (such as the distributable reserves position for each PSO). One way to effect the transfer could be by way of Members' scheme of arrangement which can be used in certain circumstances in an intra-group context. The process may be more complex than a business transfer followed by liquidation. However, one of its advantages is that it reduces the length of time needed to run off actual and contingent liabilities before a company can be dissolved.

The PSO DG anticipates the following impact on different stakeholders involved:

- **Suppliers:** Changes to underlying contracts.

- **People:** Employees become part of the NPSO. Changes in each employee's contract required. TUPE process likely.
- **Retail payment systems:** Payment services will integrate depending on the outcome of the NPA.
- **Functions:** Sequential alignment and integration of support functions.

By the end of Stage Three, the NPSO will be in a position to potentially realise the full benefits of consolidation and the creation of a new entity. It is likely that it will have expanded functions, and the rationale described in section 4 can be fully undertaken by the NPSO. It is envisaged that many of the steps for Stage Three would be completed as soon as practicable.

5.2 Project governance and management

Includes recommended project governance, management and delivery principles.

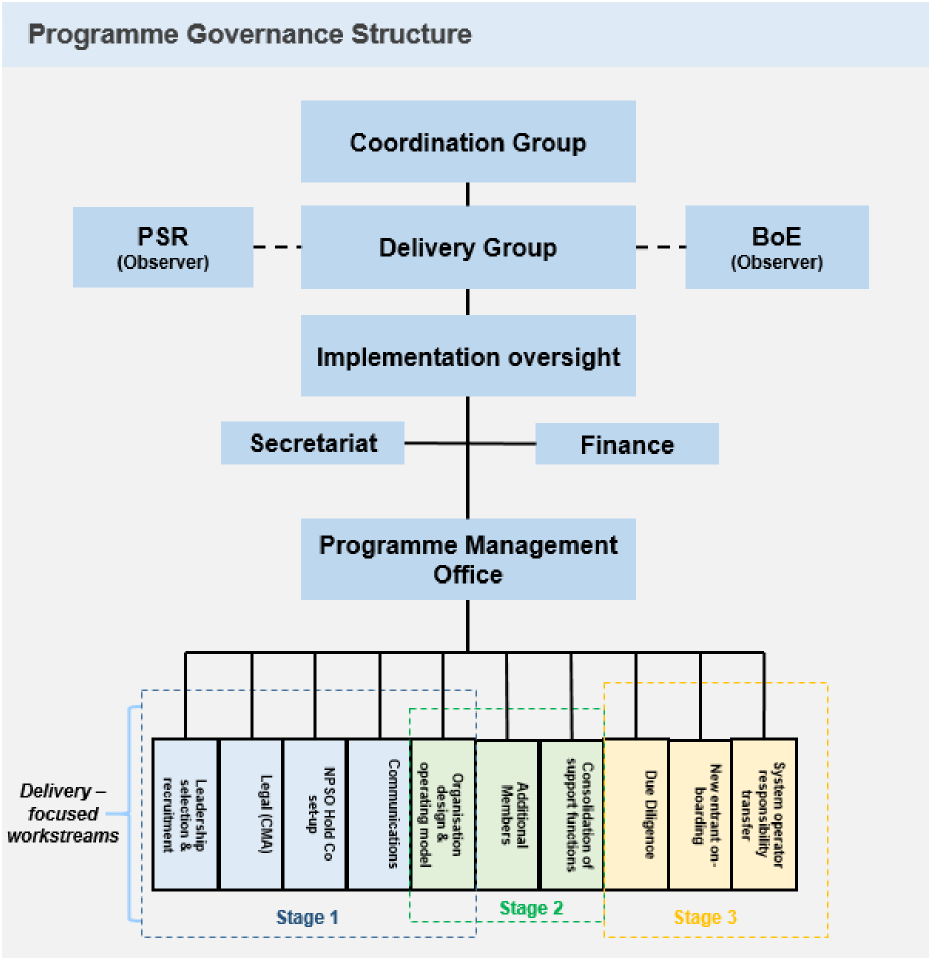
The PSO DG recommends the following structure for the governance and management of the project, to take forward the recommendations and implementation plan. The CG is likely to want to continue to have oversight until it knows that the NPSO has been established with effective (interim) Board oversight. The PSO DG is likely to be needed to remain in place until this point. An implementation group will also need to be set up to manage the project, in conjunction with a programme management office. Finally, there will be different work streams, which will carry out the activities of the implementation plan.

The high level roadmap outlined in section 5.1 discussed a number of “level one” activities. Level one equates to work stream. A draft four level implementation plan schedule has been prepared, which will be handed over to the implementation group in order to take the project forward. Detail of the suggested level two activities is included in appendix 7.6.

5.2.1 Transition phase

Figure 12 illustrates the envisaged project governance and management during the transition phase up until the beginning of Stage One (i.e. the point of establishment of the NPSO with an adequate Board to oversee it). Thereafter it is envisaged that the NPSO Board will assume responsibility for the further stages of implementation.

Figure 12. **Implementation project governance and management pre-NPSO formation**

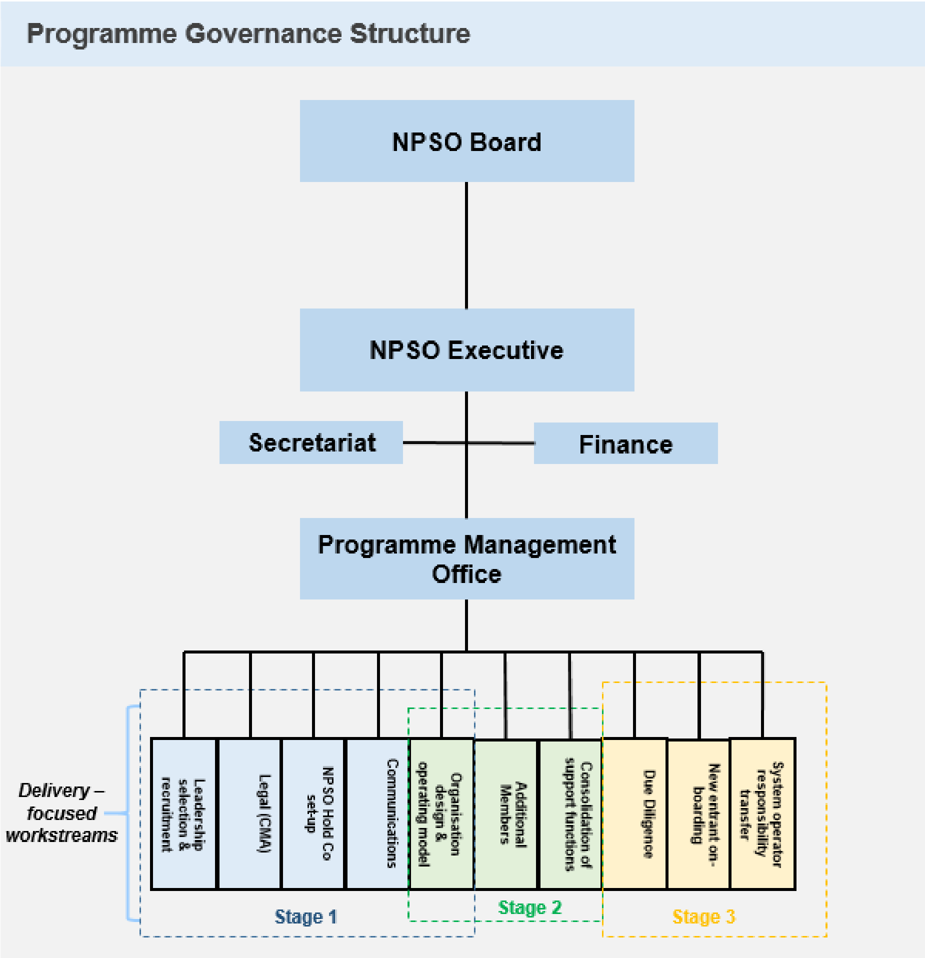


The membership of the PSO DG will continue in its current form. Implementation oversight will include the Chief Executives of the PSOs.

5.2.2 Stage One onwards

Figure 13 illustrates the envisaged project governance and management from the beginning of Stage One onwards.

Figure 13. **Implementation project governance and management post-NPSO formation**



5.2.3 Implementation principles

In addition to the governance and management steps set out above, the PSO DG has identified and recommends the following principles should be adhered to throughout the implementation:

- **Business as usual:** The impact of the project on the business-as-usual operations of the PSOs should be minimised.
- **In-flight projects:** The impact of the project on in-flight PSO projects should be minimised.
- **New projects:** The PSOs will seek guidance from the IG for any new change projects they plan to initiate in order to start to eliminate duplication of effort.
- **Other industry projects:** The IG will be aligned with, and be informed by, other industry projects e.g. Open Banking.
- **Communication:** The consistency and timeliness of stakeholder communication will be a key driver of success. The IG will therefore agree the communication approach and messages to all stakeholders, especially PSO employees (working closely with PSO executives), during the transition.
- **Ownership of plan:** The PSO DG will oversee the work of the IG as it initiates and manages the overall transition plan until it is feasible for ownership responsibility to be assumed by the Board of the NPSO.
- **Access to resources:** Where possible, PSO resources will be made available to participate in NPSO design and planning work as required, with as much notice as possible. The IG will co-ordinate the use of PSO and external resources.
- **Information exchange:** The sharing of PSO information prior to the establishment of the NPSO should be controlled, secure and in compliance with CMA requirements.

6. Key Risks and Mitigation Strategies

Prior to committing to the consolidation of the three PSOs into a single organisation full consideration to the risks of proceeding (or indeed not proceeding) needs to be given. Given that the process of considering the consolidation of the PSOs has been in the public domain for nearly 18 months, and that the New Payments Architecture and the overall Payments Strategy Forum Strategy seem dependent upon implementation of the consolidation recommendation, the risks of not proceeding are now quite significant and need to be recognised when making the decision to proceed or not. The risks of not proceeding at this point specifically include:

- Much greater complexity in realising the NPA vision with consequent impact on timetables and continued industry support and alignment;
- Potential destabilisation of existing PSO senior management who lose confidence in the strategic direction of their companies due to the very significant change of plan; and
- Significant delays in completing some of the individual PSO change and reform plans (for example in governance) that will take time and energy to re-establish.

The PSO DG has carried out an initial assessment of the key risks to a successful implementation of the NPSO, as per the design and approach articulated in this report. Against each risk the potential impact has been described, the probability and impact scored and mitigating actions proposed which the PSO DG believes can manage these risks to an acceptable level.

The risk management objective is to ensure that the actions taken to transition do not put the current services of the existing PSOs at risk, while at the same time maximising the potential of the NPSO to fully deliver against its new purpose and strategic objectives.

The transition itself does not directly touch any of the technology or contracts associated with the provision of current service and therefore the principle vectors along which potential risks could materialise are via the stability and motivation of the staff running the existing services and the new services; customer and stakeholder acceptance of and support for the process; and the financial underpinning of the new PSO. This analysis principally focuses on those areas.

Key Implementation Risks and Recommended Mitigating Actions (Relating to the change)

#	Topic	Risk Description	Impact	Prob.*	Impact*	Mitigating actions
1	**CG approval**	There is a risk that the CG requires the DG to revisit its recommendations on the design of the NPSO and the approach to consolidation	• Re-work required by the DG • Delay in implementation timetable	Low	High	• BoE and PSR attendance at the DG as observers throughout the design phase • Regular engagement during the design phase between the DG Chair and the CG
2	**Member, industry and shareholder support**	Risk of insufficient support and approval from existing PSO members and/or shareholders to the purpose, strategic direction and implementation plans outlined in the PSO DG Final Report	• Delay in implementation • Increased complexity in stakeholder management	Low	High	• Consultation with the existing members and/or shareholders has already taken place during the NPSO design work • A Member Frequently Asked Questions document is being maintained • The PSO Chairs are consulting their respective members and/or shareholders • A phase of respective Member and/or shareholder consultation for approval to the DG Final Report is planned to take place during April-May
3	**CMA approval**	There is a risk that delays or challenges in obtaining CMA approval adversely impact the consolidation timeline	• Changes to the NPSO design proposed by the DG • Delay in implementation • Consolidation stopped or reversed	Low	High	• Early and pro-active management of CMA consultation, including self-referral
5	**Disruption to Business as Usual Service**	The focus of PSO management and/or key PSO resources on the consolidation has an adverse impact on the day-to-day operations of the PSOs	• Delay in implementation • Adverse impact on business as usual services • Participant dis-satisfaction	Medium	High	• Identification of key PSO resources to support consolidation • Establish robust program governance and infrastructure to ensure the effective use of PSO management time • Monitor key risk indicators for potential impacts
6	**Resourcing**	The PSOs may not have sufficient capacity to support the transition alongside business as usual operations and other change projects	• Delay in implementation • Increased external costs to support implementation • Destabilising business as usual	High	High	• Assess resources required from each party to support transition • Engagement of PSO management to conduct capacity planning • Backfill key resources to enable them to focus on consolidation • Leverage external resources for skill and capacity gaps
7	**In-flight Projects**	The focus of PSO management and/or key resources on the consolidation has an adverse impact on the in-flight change project portfolio of the PSOs	• Delay in implementation • Adverse impact on existing projects • Participant dis-satisfaction	High	High	• Identification and effective management of any interdependencies between in-flight projects and the integration • Coordination of project plans to identify dependencies and ensure critical milestones do not conflict between projects

* Probability and impact ratings have been assigned before developing the mitigating actions, they assume the mitigating actions are not in place.

#	Topic	Risk Description	Impact	Prob.*	Impact*	Mitigating actions
8	**Information Sharing**	Information is shared pre-consolidation that is in breach of competition law	• Legal issue(s)	Low	Medium	• Agree defined protocols for the information to be shared and methods of exchange, in line with the advice of external counsel
9	**Leadership Selection & Recruitment — 1**	Inability to identify, secure and on-board suitable candidates for the Chair, CEO and other NPSO leadership positions within the timescales defined in the implementation plan	• Delay in implementation	Medium	High	• Identify an external recruitment agency and draft role profiles that can be used for the search • Initiate searches as soon as CG approval for the report is granted and PSO Members agree to the initial funding proposal • Manage a rigorous selection process
11	**Culture**	Cultural differences inhibit the collaboration between the PSO management teams and/or resources, resulting in employee dis-enfranchisement and/or constraints on the ability to realise the full benefits of the consolidation	• Delay in implementation • Employee attrition	Medium	High	• The PSOs and UKPA have already been engaged in defining the key values that should underpin the culture of the NPSO organisation • Early assessment and communication of the cultural similarities and differences between the PSOs • Early definition of the target culture for the NPSO and alignment of colleague communications to this • Development of a culture transition plan for PSO employees
12	**Suppliers**	There is a degradation of service from key suppliers due to uncertainty caused by the proposed consolidation, and/or they seek to use the consolidation to reinforce their incumbent position	• Adverse impact on existing services • Adverse financial impact on the NPSO	Low	Medium	• Develop targeted communication strategies • Develop communication for each stage of the transition process, ensuring clarity on ownership and messages at each stage • Monitor communication effectiveness to determine any necessary changes to the approach to maximise impact
13	**Wider stakeholder Engagement & Communications**	There is a risk that wider stakeholder communications across the UK payments ecosystem are not specifically or sufficiently tailored to maximise their support and commitment to the success of the NPSO	• Delay in implementation	Low	High	• Develop targeted communication strategies • Develop communication for each stage of the transition process, ensuring clarity on ownership and messages at each stage • Monitor communication effectiveness to determine any necessary changes to the approach to maximise impact
14	**Initial NPSO funding**	There are delays in securing and/or insufficient initial funding secured to finance the implementation of the NPSO and its initial operation	• Delay in implementation • Consolidation not able to proceed based on the proposed DG design	Medium	High	• Include an early indication of the required funding requirements in the DG Final Report • Discuss in detail with the CG and with respective members and/or shareholders during April-May

* Probability and impact ratings have been assigned before developing the mitigating actions, they assume the mitigating actions are not in place.

#	Topic	Risk Description	Impact	Prob.*	Impact*	Mitigating actions
15	**Financial Costs and Benefits**	The financial costs necessary to deliver the envisaged benefits from consolidation may be higher than those assumed in the initial funding proposal	• Delay in implementation • Adverse financial impact on the NPSO	Medium	Medium	• Regular analysis of the costs being incurred and comparison with budget • Continuing dialogue with Participants • Early notice of any changes to the financial plan • Incorporate tranched draw-down of funding against achievement of Stages One and Two
16	**Programme Control**	Excessive governance and management constrains efficient integration progress to be made, or insufficient governance and management results in a loss of programme control	• Delay in implementation • Increased implementation costs	Low	Medium	• Design the programme governance and management structure effectively from the outset
17	**ICS Co**	The ICS Implementation Project and the NPSO Consolidation Project are not able to be synchronised as envisaged in the implementation plan	• Failure to deliver the ICS project on time • Failure to deliver the consolidation of the NPSO with respect to ICS	Medium	High	• Continued representation on the DG of the Chair of C&CCCL • Participation in the Implementation Steering Group of the C&CCCL Chief Executive
18	**Employee Attrition**	Failure to retain key PSO talent due to uncertainty, insufficient engagement in the design and delivery of the NPSO, inadequate retention measures or poor communications	• Employee attrition • Employees feel de-motivated • Delay in implementation • Destabilising business as usual service	Medium	High	• The respective PSO CEOs and senior management teams are being regularly updated on progress and consulted on key aspects of the design and plan • Provide employees with information about the future of the NPSO and impact on them as soon as is feasibly possible • Consider retention strategies within each PSO • Develop and communicate the future NPSO reward strategy • An Employee Frequently Asked Questions document is being actively maintained • Put plan in place to ensure existing staff are fully involved in the transition planning and implementation
19	**Synergies**	Insufficient understanding of the differences and similarities in the PSO services and approach to be able to handle them appropriately in the consolidation and subsequent integration	• Consolidation and subsequent integration is ineffective	Low	Medium	• Assessment of similarities and differences of the PSO services should be included in the scope of the due diligence, then explored further and adequately managed at the appropriate time.

* Probability and impact ratings have been assigned before developing the mitigating actions, they assume the mitigating actions are not in place.

#	Topic	Risk Description	Impact	Prob.*	Impact*	Mitigating actions
20	**Due Diligence**	Unforeseen liabilities from existing PSOs are introduced into NPSO due to poor planning and due diligence	• Delay in implementation • Adverse financial impact on the NPSO	Low	High	• Commence due diligence at the earliest opportunity post approvals
21	**Liability & Tax Management**	Failure to adequately understand and sufficiently handle the liability and tax management associated with changes of PSO shareholding and membership	• Increased liability (including tax liability) • Increased complexity in stakeholder engagement	Medium	Medium	• Assessment of liabilities and tax liabilities should be included in the scope of the due diligence, then explored further and adequately managed at the appropriate time.

* Probability and impact ratings have been assigned before developing the mitigating actions, they assume the mitigating actions are not in place.

7. Appendices

7.1 PSO DG Terms of Reference

The Terms of Reference for the PSO DG are publicly available and can be found on the PSR's web site at: www.psr.org.uk/psr-pso-dg-terms-of-reference

FINANCIAL CONDUCT AUTHORITY PAYMENT SYSTEMS REGULATOR BANK OF ENGLAND

Terms of Reference

PSO Delivery Group

NOVEMBER 2016

1. Background

The Payments Strategy Forum (the Forum) will publish its final Strategy in November 2016. Through its Draft Strategy one option it is consulting on is the consolidation of the governance structures of three interbank payment system operators (PSOs). The PSOs in scope for potential consolidation would be BPSL, FPSL and C&CCCL. In addition, the Forum's Draft Strategy proposed the Bank and PSR take a role in considering the best approach to consolidation, should it go ahead.

The Bank of England (the Bank) and the Payment Systems Regulator (PSR) each have an interest in ensuring that any outcomes of the Forum's Strategy are consistent with their respective objectives and that they are implemented and delivered effectively.

The Forum's final recommendation on the potential consolidation will not be made until November 2016. However, the Bank and PSR started considering options regarding any potential consolidation after the publication of the Forum's Draft Strategy. This planning is aimed at minimising uncertainty and ensuring their objectives are fully met should the Forum recommend that the consolidation goes ahead. Ensuring that implementation of any consolidation is prompt would be important for resilience, an effective transition and minimising disruption for service users. In addition, the Bank and the PSR see that consolidation, if effectively delivered, could generate a number of benefits and contribute to advancing their statutory objectives.

The Bank and the PSR have therefore decided to establish a Coordination Group (CG) which will provide a forum for senior level discussion on important issues related to the regulation of PSOs. This group has recommended establishing a PSO Delivery Group.

2. Purpose and Scope

This Delivery Group (DG) is being established by the Bank and PSR to consider key issues relating to any potential PSO consolidation. It is to develop options and make recommendations relating to aspects of the proposed consolidation.

The implementation options and recommendations document will comprise the DG's recommendations on key characteristics of the new entity and the project plan for consolidation. It will include the outputs that are explained as part of section 3 below.

These options and recommendations should be completed and submitted to the Bank and the PSR by no later than **31 March 2017**. The plan should enable any consolidation process to be substantially accomplished to a safe, realistic but challenging deadline. This is expected to be by no later than **31 December 2017**.

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3. Outputs

Implementation options and recommendations document

The DG will produce an implementation options and recommendations document, which includes making recommendations on policy issues (as listed at A-D below) as well as a detailed project plan for delivery of the consolidation – the plan should specify any aspects of the consolidation that would not be complete by the 31 December 2017 deadline. The outputs listed below must be included in the document.

In developing the options and making any recommendations, the DG must ensure that relevant obligations of PSOs and their members, in particular with regards to competition law and the law relating to payment systems and services, are properly taken into account.

A) Recommendations on the *key characteristics* of the new entity.

The DG should define a limited number of key characteristics for the new entity. The key characteristics of the new entity should include, but are not limited to its:

- Purpose
- Principles, culture and values
- Strategy
- Stakeholders landscape
- Initial and key functions
- Legal form
- Nature (profit/not-for-profit)
- Ownership
- Funding model
- Board composition
- Approach to service-user engagement and representation
- Voting structure

First establishing the new entity's purpose, strategy and stakeholder landscape will support the effective consideration of its other characteristics.

B) A recommended option for achieving any consolidation.

The DG should consider the relative merits of different methods for creating the consolidated PSO, and recommend which method is most suitable. The non-exhaustive list of methods expected to be considered includes:

- Merging all entities into an existing scheme
- Creating a new entity and absorbing the three schemes into it
- Creating new parent entity with existing schemes as subsidiaries

C) A recommended resource strategy and appointment process for key personnel

The DG should consider a resourcing strategy and a process for the key appointments required for the delivery of consolidation and the future successful operation of the new entity. This would include defining a process to appoint the chair and chief executive.

D) Identification of any additional necessarily collaborative functions the new entity may become responsible for in the future and consideration of the development of a flexible structure to cope with such changes

The new entity is expected to be capable of adapting to a changing environment (for example, be equipped to take forward initiatives beyond the operation of the core payment services of the existing PSOs). As such, the DG should identify any other issues or functions that need to be considered by the new entity (for example, implementing and managing APIs or other Forum initiatives as appropriate). Accordingly, it should have a sustainable financial structure that supports its purpose and objectives, including the ability to raise funds for projects that advance its purpose and objectives.

4. Requirements in developing the implementation plan

In developing the implementation plan, the DG will need to be mindful of the Bank's and the PSR's objectives and consider the extent to which particular arrangements are likely to further those objectives.

In particular, the DG should have regard to the need for the new entity to support the robustness and resilience of the financial system, comply with relevant regulatory requirements, and should seek to minimise transitional risk.

The new entity should be set up, governed and operated in a way that facilitates effective competition in adjacent relevant markets. This would include facilitating open access and participation in payment systems as well as competitive procurement of infrastructure services.

The new entity should also be capable of adapting to a changing environment and responding to implement innovation, as discussed in section 3D in this document.

Additionally, the purpose of the new entity should include a focus on the needs of service users[1]. Its Board and management should understand a full range of service user needs.

The implementation plan must ensure that there is no impact on the pipeline of PSPs on-boarding to the three payment schemes (e.g. as part of work on structural reform or new entrant PSPs).

In considering how the design of any consolidated entity achieves these requirements, the DG should consider the full range of options for the new entity's objectives, governance, ownership, nature and legal form to enable it to fulfil its purpose.

These options and recommendations document should enable any consolidation process to be completed to a safe, realistic but challenging deadline. This is expected to be by no later than **31 December 2017**. It will be important for the DG to regularly update the CG on its thinking on these issues.

[1] Including businesses that access and rely on payments, as well as end users.

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5. Constitution and Governance

Chair

The Chair of this DG has been appointed by the PSR. The Bank was part of the selection process that leads to the Chair's appointment. The Chair will be ultimately responsible for ensuring the DG delivers the work as outlined in this Terms of Reference document. If there are disagreements within the DG on how the work should be progressed, the final decision will rest with the Chair, who may consult the CG.

Membership

The membership of the DG will comprise the following:

Position	Member
Independent Chair	Robert Stansbury
Chair of C&CCCL	Jane Bevis
Chair of BPSL	David Rigney
Chair of FPSL	Nick Caplan
Forum representative (large PSPs)	Russell Saunders
Forum representative (small and medium PSPs)	Becky Clements
Forum representative (end users) and deputy chair	Faith Reynolds

The quorum

The DG will be quorate when:

- The chair or the deputy chair, are present; and
- At least two of the PSO chairs are present; and
- At least two of the Forum representatives are present; and
- Where only five members are present, the chair is among those 5.

Observers

The Bank and the PSR will attend the meetings as observers.

Support

It is expected that the DG will require support developing the implementation options and recommendations document. It is also expected that the DG is provided with the necessary legal and technical support where appropriate.

Relationship with Coordination Group, the Forum and members of the PSOs

It is expected that the DG Chair will regularly attend CG meetings on the invitation of the CG. The Chair will discuss developments in the DG – in particular the issues identified in section 4.

The DG includes three members who will represent the Forum. These members will have a key role in consulting and canvasing the views of Forum members on key issues being considered. In particular, members that are representatives of the Forum should provide a point of coordination between the Forum's activities and the DG's activities and update the Forum on progress where necessary. However, the DG is not a subset of the Forum and will not report to it.

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Similarly, the PSO members of the DG will have a responsibility to properly consult with the members of the PSOs seeking to ensure they are supportive of the proposals that are recommended by the DG and to ensure that the appropriate consequences of the options are fully explored for all members of the PSOs.

Funding

Given that the purpose of the DG is to make recommendations on the key characteristics that will ultimately establish a new consolidated PSO, the activities and expenses incurred by the DG should be funded by the PSOs or members of the PSOs.

6. Administration

Meetings

Initially the DG will meet fortnightly, with potential to meet more or less frequently depending on the requirements of the work.

It is expected that the location of the initial meeting will be at the PSR offices. The location of subsequent meetings will be Thomas More Square.

Secretariat

It is expected that the Members of the DG will provide the resources for the secretariat.

The secretariat will form the administrative functions for the DG, which includes organising meeting dates and locations and circulating papers.

Meeting summary

The meetings of the DG should be recorded and a meeting summary should be published on the PSR's website.

7.2 Extract from PSF report with recommendation to consolidate the three retail PSOs

6. Business Case Evaluation of our Strategy

Overview of this section

6.1. In considering how best deliver our Solutions, described in detail in the previous section, we have developed three infrastructure scenarios shown in Figure 26. We have considered these scenarios due to the impact that the underlying infrastructure will have on the delivery of our Strategy and Solutions.

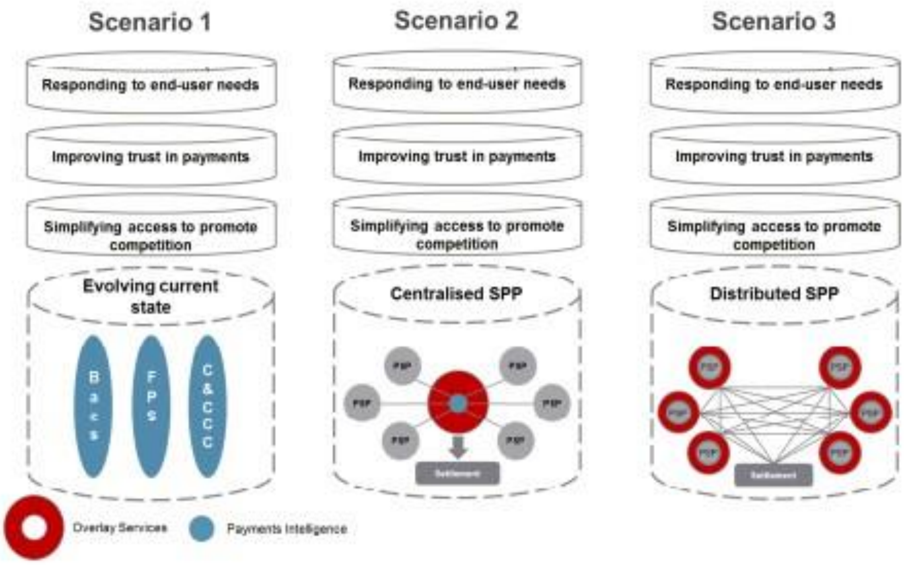
6.2. It is recognised that the current Business Case Evaluation (BCE) exercise was based on the existing available information at this phase of our work. It will be revisited and refined into a full economic evaluation during the next phase of the Forum's work, once standards definition, detailed design and implementation planning are conducted, including impact on end-users. Therefore current BCE has been conducted in order to inform the decisions of the Forum at this stage, and should not be considered final.

Overview of scenarios

6.3. Our three potential future payments infrastructure scenarios have been subject to a BCE as part of developing our Strategy; in the analysis, all scenarios seek to deliver the full portfolio of Solutions. The three scenarios considered are:

i. **Evolving Current State**: building on our current payments infrastructure
ii. **Centralised SPP**: a new payments architecture with a single, centralised retail interbank payments system
iii. **Distributed SPP**: a new payments architecture with a single, distributed retail interbank payments system

Figure 26: Scenario construction



6.4. In Figure 27 we have laid out the characteristics of each of the scenarios across seven attributes to highlight the differences in approach for the architecture that will support the development of all of the Solutions.

Figure 27: Overview of infrastructure scenarios

Scenario attribute	Scenario 1: Evolving infrastructure	Scenario 2: Centralised SPP	Scenario 3: Distributed SPP
Payment system(s)	Current retail interbank payment systems remain	The current retail interbank payment systems are replaced by a single push payment rail, which is operated by the Single Consolidated PSO	Current retail interbank payment systems are replaced by a distributed, single push payment rail
Technical development	Making changes on the existing payments infrastructure, however, this is constrained by existing technical limitations and must be replicated across four payment systems	Development of a new central infrastructure to support one single payments system built on layered architecture	This can be achieved through modern technology with distributed architecture
PSP connection	PSPs connect to individual payments systems (either directly or via aggregators)	PSPs connect to a single central payments system	PSPs connect directly to other PSPs
Governance	Governance by a the Single Consolidated PSO	Governance by central body[20]	Governance by central body[20]
Payment mechanism & messaging	Messaging embedded in core payments mechanism	Payment through single push payment rail with other services offered as overlay services by competitive market	Payment through single push payment rail with other services offered as overlay services by competitive market
Settlement	Information provided by the Single Consolidated PSO to BoE RTGS	Information provided by the Single Consolidated PSO to BoE RTGS	Information provided by PSPs to BoE RTGS, in accordance with BoE requirements

6.5. Each of the scenarios will have an impact on key dimensions of the Solution. This is most notable in the distinctions between using the current infrastructure and developing a new architecture as shown in Figure 28.

[20] It is anticipated that this will be the Consolidated PSO.

Figure 28: Overview of the impact of each of the infrastructure scenarios on our Strategy and Solutions

Solution dimension	Scenario 1: Evolving infrastructure	Scenario 2: Centralised SPP	Scenario 3: Distributed SPP
Messaging	Any changes to messaging would require changes to the complex core of each payment system and would need to be implemented across multiple payment systems	Modern messaging standards and requirements built-in	Modern messaging standards and requirements built-in
Functionality	New functionality require changes to the core of each payment system and would need to be implemented across multiple payment systems	New functionality easily added through overlay services	New functionality easily added through overlay services
Access	Multiple payment systems to access, aggregator solutions exist	One centralised payments system to access	One distributed network to access
Risks	• Slower development • Reactive rather than proactive	• Potentially high costs for participants • One point of vulnerability for attacks to the system • System may be disrupted by the addition of new members	• Participants have a higher degree of responsibility in preserving the integrity of the system. • Not yet proven at scale for payment systems

Summary of BCE results at Scenario level

6.6. This section presents the aggregated Solution results under of the BCE. The findings presented in this summary section have been adjusted so as to eliminate double counting in situations where there is a duplication of costs and/or benefits across Solutions. More information on the findings and assumptions can be found at in the supplementary documentation on our website.

6.7. In estimating the net benefits, only the incremental costs have been taken into consideration. These are additional costs that would borne as a result of evolving the current infrastructure or building a SPP. These exclude costs that will be incurred in a “do-nothing” scenario.

6.8. As we go through detailed design we will reassess the BCE on the basis of the additional information. So the figures shown inform our direction at this stage, but will change as we progress, we will also consider whether differing execution risks would need to be factored into the model, depending upon the architectural approach. This may bring the relative BCE results closer together.

6.9. On the basis of our analysis, we have reached three main conclusions:

- Under all three scenarios assessed, the BCE shows that the incremental benefits exceed the incremental costs
- The analysis shows that the Simplified Payment Platform scenarios lead to a better outcome from a BCE perspective compared to evolving the current infrastructure
- The assumed rate of adoption for our Solutions has a considerable impact on the results of the BCE. To account for this impact, the net benefit figures we present are across a range (from low to high adoption)

6.10. The difference in net benefit between the Evolving Infrastructure and the two SPP scenarios is substantial. The SPP scenarios have a net benefit of between £0.8 bn and £1.5 bn in excess of the Evolving Infrastructure[21][22]. The BCE estimate also shows a higher net benefit for the distributed SPP scenario over centralised SPP. We believe that alongside the net financial benefit, the ability of our proposed NPA do adapt to future, as yet unknown needs of users, makes the case for a detailed design phase incontrovertible.

6.11. These findings will be reassessed as we move into the detailed design phase for our Solutions.

[21] Assuming a moderate adoption rate over 10 years.
[22] More information on the BCE analysis can be found in the supplementary documentation on our website

7.3 Analysis of the initial funding required for the NPSO

Introduction

This Initial Funding Proposal for the NPSO presents a "best guess" (as a range) of the funding that will be required to get the NPSO up and running. This appendix sets out:

- The envisaged amount of the funding required, and the assumptions behind those numbers (amount of funding).
- Suggestion around how the funding might be evidenced (funding instrument).
- Suggestion regarding the sources of the Initial Funding, whilst building in flexibility for the future (anticipated source of funding).

Amount of Funding

Overview

The "best guess" amount of funding is detailed below in the following elements:

1. Transition phase funding
2. Project delivery costs
3. NPSO run costs
4. NPSO additional reserves

The lower estimate of these costs is £6.8 million and the higher estimate is £8.8 million (plus any additional reserves that may be required for Bacs, FPS, ICS and the NPSO Hold Co).

An outline of the anticipated timetable over which this funding requirement will need to be paid in and details on what is included in these are provided below.

Timetable and tranching

The overall intent behind this initial funding proposal is that:

- The funding will be set up in tranches to provide adequate funding for each of the different stages of the implementation of the NPSO.
    - Transition phase is anticipated in 2Q2017 (£300,000) (to be funded through PSOs)
    - Tranche A: low estimate of the funding required for the start of Stages One and Two, anticipated in 3Q2017 (£3,227,000)
    - Tranche B: additional funding for the high estimate required for the start of Stages One and Two, anticipated (to the extent needed) in 4Q2017 (£1,587,000)
    - Tranche C: low estimate funding required for the start of Stage Three, anticipated in 1Q2018 (£2,253,000)
    - Tranche D: funding required for contingency reserves for the NPSO Hold Co, anticipated in 2Q2018 (£1,000,000)
    - Tranche E: high estimate for the start of Stage Three (£453,000) and (TBD) any additional reserves anticipated (to the extent needed) 3Q2018

Estimate (£)	Tranche	2Q2017	3Q2017	4Q2017	1Q2018	2Q2018	3Q2018	TOTAL
Low	Transition phase	300,000						**6,780,000**
	A		3,227,000					
	C				2,253,000			
	D					1,000,000		
High	B			1,587,000				**8,820,000**
	E						453,000	

Funding Instrument

It may be useful if a specific funding instrument is designed and used for the NPSO, for the Initial Funding, which could also be used for Additional or Extraordinary funding needs in the future. This would be different from the current funding mechanisms for the existing PSOs where Members are asked to provide funds by way of a "call".

The precise characteristics of the funding instrument can be determined after dialogue with the principal prospective providers of the funding, but it is anticipated that it will have the following characteristics:

- It will be a form of long-term debt or quasi-capital instrument (suggested greater than 50 years or even perpetual).[8]
- It may, or may not, need to be subordinated.
- It should be repayable early, in whole or (more probably) in part, at the instigation of the NPSO.
- It should bear a coupon, so that the NPSO has an incentive to repay it, if and when its reserves are deemed to be "surplus" to requirements.
- It should be repeatable, so that the same instrument can be used for future Additional or Extraordinary fundraisings.

Anticipated Source of Funding

It is anticipated that the source (or at least, the underwriting) of the Initial Funding (and the probable source of a significant proportion of future Additional or Extraordinary Funding) will be the institutions who are also the principal Participants in the NPSO payment systems. It will be a condition precedent for the initiation of Stage One of the implementation plan set out in the report, that sufficient commitments to provide the Initial Funding would have been provided by that group of institutions.

Funding would not be an obligation, and so each future funding proposition will need to clearly state the rationale for the funding. (This document sets out the rationale for the Initial Funding). Given that much of the funding needs of the NPSO, including the initial funding, will be, up-front, relatively imprecise as to amount (although the purpose will be clear), it will be important that any overfunding can be repaid.

[8] Any quasi-capital instrument would need to refer to PFMI expectations and be as closely akin to equity as possible.

Detailed analysis

1. Transition Phase Funding

PSO Consolidation project costs already funded by the three PSOs are considered 'sunk' costs from the NPSO perspective. These costs have already been provided via the PSOs, or are anticipated to be needed for the interim phase before the NPSO is set up with its own funding. No change in the existing funding mechanism (i.e. calls on members) for this funding:

Ref.	Cost type	Cost driver	Estimated cost (£)
1	Already committed project costs	Project management support and CMA legal advice	450,000
		Other external support yet to be commissioned	300,000
	TOTAL		**750,000**

Note: The additional £300,000 of funding, approval for which needs to be sought from the individual PSO Boards, is to enable the project to continue from end March until such time as the overall project delivery funding for Stages One onwards has been committed, as outlined below.

2. Project delivery costs Stages One and Two

These are the cost assumptions related to the project delivery which will arise during Stages One and Two of the project (see section 5.1.3). It is envisaged that these two stages will be completed by the end of 2017 and so the costs will arise in this year.

The lower/ higher assumptions related to this element of the initial funding requirement are:

- External support will be required, as a minimum, for: legal support to the merger process; legal support to the NPSO entity set-up; tax advice on the merger; due diligence on each of the three PSOs; and recruitment of the NPSO chairperson and CEO;
- The current PSOs may not be able to release sufficient internal resources to fully manage NPSO project delivery during Apr-Dec'17 or if they can, backfill resources will be required in BAU;
- Given that ICS will be a new company, a lower amount of due diligence will be required for that company.

Ref.	Cost type	Cost driver	***Estimated cost (lower) (£)***	***Estimated cost (higher) (£)***
2	New project costs	Tax and legal support on the merger process	300,000	400,000
		Due Diligence	375,000	675,000
		Other professional costs	192,500	236,250
		Project management and work stream support (potentially backfill of PSO resources)	550,000	1,100,000
		Contingency buffer	300,000	600,000
TOTAL (approximately)			**1,725,000**	**3,010,000**

3. NPSO run costs

These are the incremental costs assumed for the running of the NPSO once established along the lines recommended in this report.

The assumptions related to this element of the initial funding requirement are:

- NPSO operating costs will in due course be covered by PSO transaction fees.
- No specific budget has been assumed for employee retention costs, as it is assumed that these are included in the existing PSO budgets.
- While cost synergies are likely to be realised over time from the PSO consolidation, this will not materially affect operating costs until Stage Three and therefore have not been factored into the initial funding requirement.
- Costs for End-User Council included; assume Participants' Council will be largely unremunerated.
- Costs related to Design & Delivery and Standards Group included.
- Costs associated with PSF (NPA) and Open Banking are excluded.
- The NPSO will incur administrative costs in relation to: auditor fees; and UKPA support.

Ref.	Cost type	Cost driver	*Estimated cost (lower) (£)*	*Estimated cost (higher) (£)*
3	NPSO run costs	Board and Council costs	590,000	780,000
		Executive costs	1,150,000	1,500,000
		Design & Delivery; Standards Groups	1,700,000	1,700,000
		Administrative costs	315,000	530,000
TOTAL			**3,755,000**	**4,510,000**

It is anticipated that of the above annualised costs only a proportion would arise during 2017 with the balance needing to be funded from 2018 onwards. Given the likely timetable it is assumed that 40 percent would be required up-front in 2017 with the balance required later.

4. NPSO additional reserves

The assumptions related to this element of the initial funding requirement are:

- The level of NSPO regulatory reserves may be higher or lower than those of the current PSOs combined. This will be dependent upon whether the Board of the NPSO (with the approval of its regulator) determines that there may be increased risks arising from the merger, or whether it determines that there are diversification benefits arising, resulting in a lower figure.
- The level of regulatory reserves for ICS Co. are subject to ongoing discussion within the C&CCC Board and will be quantified in due course.
- With respect to the current regulatory reserves held within Bacs and FPS, it is assumed that these reserves would be up-streamed, to NPSO, as part of the process of handover of their operator responsibilities.

Ref.	Cost type	Cost driver	*Estimated cost (lower) (£)*	*Estimated cost (higher) (£)*
4	NPSO reserve requirements (estimate)	Replacement reserves - Bacs	100% of existing reserves	100%+? Of existing reserves
		Replacement reserves - FPS	100% of existing reserves	100%+? Of existing reserves
		New reserves - ICS	TBD	TBD
		Hold Co. Contingency reserves	1,000,000	TBD
INCREMENTAL TOTAL			**1,000,000**	**TBD**

The figure for the contingency reserves is a holding figure which may or may not need to be increased once the Board determines the overall scale of capital requirements that will be needed to ensure the sustainability and resilience of the NPSO. “Sustainability and resilience” in this context are likely to include the capability to fund, out of reserves, six months (or longer) of expenses; recovery from disasters; and resolution in the event that recovery is not possible.

7.4 Systemic risk manager operator considerations

Bacs and FPS have been recognised as being systemically important and designated by HM Treasury for statutory oversight by the Bank of England. These two PSOs are financial markets infrastructures, and are supervised by the Bank as systemic risk managers. Without doubt this will also be the case for the NPSO. It will be able to build on the existing rules, assurance and enforcement structures within Bacs and FPS, and enhance them to meet the Bank of England's standards and expectations.

For the NPA, the NPSO will need to work up its model as to how to be an effective systemic risk manager for this new model. This may differ depending on the model for the NPA that is adopted, i.e. whether it is a centralised model (where the infrastructure and connectivity between PSPs is provided by a single central infrastructure) or a decentralised model (where connectivity is established between PSPs and allows for PSPs to procure their own infrastructure).

Given that the requirement to be an effective systemic risk manager for the NPA is likely to drive key early decisions about the size and structure of the NPSO's functions, the following contains some examples of what the NPSO is likely to need to work up in detail (this is not intended to be an exhaustive list).

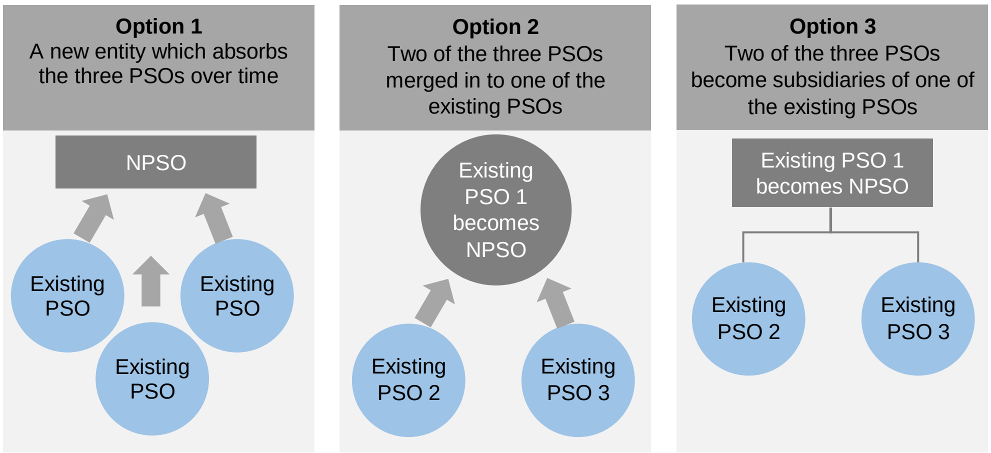
Managing risks across the payment ecosystem and adapting to new and changing risks	The NPSO will be responsible for assessing and mitigating end-to-end risk across the payment ecosystem. These risks may differ depending on the model of the new payments architecture that is adopted and the operational and risk management challenges that relate to it. For example, a key area of concern is likely to be cyber risk – the NPSO will need to work up models to protect the integrity and continuity of the NPA from cyber-attacks. The NPSO Board, leadership team and staff will need to have the right skills and strategic ability to adapt to and manage risks arising and evolving across the new ecosystem.
Delivering high levels of infrastructure robustness and resilience	The Bank of England has noted that where a new payments architecture concentrates retail payments through a single mechanism (such as the Single Delivery Mechanism in the Simplified Payments Platform), and thus reduces the scope for substitutability, then the resilience of the single mechanism becomes even more important. The NPSO will be responsible for ensuring that the new payments architecture is sufficiently robust and resilient and will need to have a very low risk appetite for operational incidents, given the NPA's centrality and likely lack of many credible substitutes. These will require work both to minimise the probability of operational incidents across the ecosystem and to minimise the impact of operational incidents when they do occur.

Assuring the integrity of the payment system in light of the full range of Participants, service providers and third parties interacting with the system	The NPSO's responsibility for assuring the integrity of the payment system extends across the range of Participants in it, service providers to it and third parties interacting with it. The status quo is one of a relatively small number of bank memberships, central infrastructure procurement and limited interactions with third parties. The new payments architecture is likely to involve a broader base of Participants, of different kinds, as well as interconnections with third parties such as overlay service providers. Also, if the decentralised model is adopted, the NPSO will not control an infrastructure contract with a sole supplier; instead, there may be more than one infrastructure supplier involved across the system contracting directly with PSPs. The NPSO can therefore expect to require strengthened assurance or accreditation and policing functions, ensuring that there are rules and standards in place for participation in, service provision to and interaction with the system, and that non-compliance is identified and dealt with appropriately. The Bank of England has indicated that, in respect of the decentralised model, it will expect the NPSO to authorise or accredit infrastructure providers against robust standards and be able to ensure ongoing compliance with them, including through the use of appropriate sanctioning tools. Given the NPSO may not have formal contracts with such providers – as the contractual relationship may be between PSPs and accredited infrastructure providers – the NPSO may need to arm itself with larger and more impactful assurance teams to test rigorously that its standards are being met on a continual basis. The Bank of England has also said that it expects the NPSO to ensure the same high standards of any third party providers of overlay services connecting to the infrastructure. As with decentralised infrastructure providers, the NPSO will need to have the capacity to undertake robust assurance assessments on accredited third party providers to ensure its standards are maintained. While this can be proportionate – such that less assurance is undertaken on less systemic providers – even the smallest provider can bring substantive risk to the platform (e.g. through cyber-attacks) and so this could require substantial activity.
Grounding settlement in central bank money	Whatever model for the new payments architecture is adopted, the NPSO will be responsible for ensuring that it is underpinned by, and promotes, settlement in central bank money. The NPSO will also need to ensure that settlement retains the existing level of legal certainty as provided for under the Settlement Finality Directive designations of Bacs, C&CCC and FPS.

7.5 Analysis of design options

PSO consolidation options

Three consolidation options were discussed and evaluated by the PSO DG:



<table>
<tr><td rowspan="4">Each option was assessed against 12 criteria</td><td colspan="2">Option 1 impact assessment</td><td colspan="2">Option 2 impact assessment</td><td colspan="2">Option 3 impact assessment</td></tr>
<tr><td>Total Greens</td><td>8</td><td>Total Greens</td><td>0</td><td>Total Greens</td><td>0</td></tr>
<tr><td>Total Amber</td><td>4</td><td>Total Amber</td><td>10</td><td>Total Amber</td><td>10</td></tr>
<tr><td>Total Red</td><td>0</td><td>Total Red</td><td>2</td><td>Total Red</td><td>2</td></tr>
<tr><td>Recommendation</td><td colspan="6">Option 1 is <u>recommended</u> because it has the highest Impact Assessment scoring. This was primarily driven by four factors
It reinforces perception of it as a merger (rather than one PSO being a dominant force) and an opportunity to create something new and better
There is a greater sense of fairness with all three existing PSOs having equal footing
There is a reduced risk of the NPSO target operating model design being constrained or compromised by legacy PSO issues and challenges
There is lower transition complexity and risk</td></tr>
</table>

Criteria used for assessing the consolidation options

The approach to analysing the options was to hold an initial discussion at the PSO DG and to confirm the options to be assessed, impact assess the three options against defined criteria and then hold a further discussion with the PSO DG on the assessment scores and to confirm the preferred approach.

Objective	Criteria	
All Objectives	Designed for Strategic Integrity	Does the option help ensure strategic integrity?
	Designed for the Future	Does the option help enable the NPSO to be operationally effective from the outset and also to be fit for purpose in the future?
Attractive Access	Reduced Barriers to Entry	Does the option support the ambition to reduce barriers to entry and enable a more dynamic payments industry?
End-User Focus	Stakeholders and Participants	Does the option allow Participants to continue to enjoy payments services equal to or superior to those which they enjoyed before and changes to services or products to be seamless to End-Users?
Robustness & Resilience	Systematic & Operational Risk	Does the option help maximise systematic resilience and minimise operational risk?
	Regulatory Impact	Is the option aligned to regulatory requirements for systemically important PSOs?
	Ownership & Governance	Does the option help facilitate the introduction of a new ownership and governance model for the NPSO?
Agility	Implementation Complexity	How easy would it be to implement this option within the identified timeline? To what degree would it help minimise the risk of disruption to business as usual performance during the transition?
Efficiency	Consultation & Approval Impact	To what degree would the option drive the need for a lengthy consultation or approval process?
	Efficiency	Does the option offer the best compromise between the costs and effort related to transition and ongoing operating costs of the NPSO?
Excellent People	People	Does the option help manage key person risks and engage PSO staff in an exciting future vision for the NPSO?
	Cultural Consistency	Does the option help facilitate a transition from current PSO cultures and values to those of the NPSO?

NPSO high level design — options analysis — results

	Criteria	Option 1 Impact	Option 2 Impact	Option 3 Impact
All Objectives	Designed for Strategic Integrity	Enables optimal design in order to achieve strategic objectives.	Legacy issues from the existing PSO may constrain design elements and the ability to achieve strategic objectives.	As per Option 2
	Designed for the Future	Enables design from inception with a focus on research and innovation.	Likely to be challenging to move forward as a NPSO at the necessary speed.	As per Option 2
Attractive Access	Reduced Barriers to Entry	Structure enables pricing terms to be reset as required. Access improvements may not be as impactful as some expectations.	As per Option 1	As per Option 2
End-user	Stakeholders & Participants	Enables a fair design, without bias from previous PSO relationships.	Some Participants may face greater realignment/change than others.	As per Option 2
Robustness & Resilience	Systematic & Operational Risk	Systematic and operational risks may be inherited. Option enables risk framework to be optimally designed.	Systematic and operational risks may be inherited. Risk framework is likely to be that of the existing PSO.	As per Option 2
	Regulatory Impact	Easier to demonstrate to regulators that the structure and board will be designed optimally for the NPSO.	Regulators are likely to be interested in how the existing PSO can transform.	As per Option 2
	Ownership & Governance	Ability to design and shape optimal governance framework and board composition	Will inherit existing board composition and governance framework.	As per Option 2
Agility	Implementation Complexity	Easier to progress the project when less constrained by limiting factors from legacy PSOs	Holds complexity and may be constrained by limiting factors from legacy PSOs.	As per Option 2
Efficiency	Consultation & Approval Impact	Consultation process likely to face less challenges, but similar requirements to consult	Consultation may be lengthened due to expressions of dissatisfaction from some parties.	As per Option 2
	Efficiency	Allows creation of hubs of expertise, leveraging economies of scale with suppliers.	The model of the existing PSO is likely to prevail.	As per Option 2
Excellence in People	People	Opportunities created for people from all three PSOs. Helps reduce attrition risks	Potential sense of unequal career opportunities. Feels like a takeover	As per Option 2
	Cultural Consistency	Easier for employees to transition to a new structure and vision, enabled by a new culture and values	Harder to change an existing culture from within one PSO and to realise the desired culture	As per Option 2

7.6 Implementation plan

A draft implementation plan has been prepared by the PSO DG to assist with the planning for the NPSO implementation project. The draft implementation plan identifies the key activities required for the project in line with the likely sequence of events as per section 5.1 of this report and provides more detail on the consolidation and integration process which is set out over three stages in section 5.1.3 of this report.

The draft implementation plan contains four levels of activity. These four levels link to the programme governance structure of the implementation project and enable tracking at different levels.

This appendix (Section 5.1) contains:

- Definitions of the four activity levels contained within the draft implementation plan
- A summary of the level 1 and level 2 activities suggested within the draft implementation plan

	Draft implementation plan: Definitions of task levels			
Activity Level	**Description**	**Tracked at**	**Frequency**	**Milestone reportable to**
Level 1	High level stages of the overall implementation plan. Level 1 high level stages will be used to describe the key stages in the implementation plan for the purpose of stakeholder engagement and executive briefings.	Programme level	Monthly	Reportable to the PSO DG
Level 2	Key steps within the high level stages of the implementation plan.	Programme Level;	Fortnightly	Implementation oversight
Level 3	Detailed steps within the project plan. Level 3 detailed steps support the delivery of the Level 2 key steps within the implementation project plan.	Work stream level;	Weekly	Programme Management Office
Level 4	These are activity level details to inform and guide the implementation project team through delivery. Level 4 activities support the delivery of Level 3 steps. It is likely that level 4 activities will need to be added to the plan as the implementation project progresses.	Work stream level	Daily	Work stream Leader

Draft implementation plan: Summary of level 1 and level 2 activities		
Ref	**Level 1 Activities**	**Level 2 Activities**
1	**Leadership selection & recruitment (including NPSO Chair & CEO recruitment)**	
1.1		Prepare for leadership selection and recruitment
1.2		Agree selection panel
1.3		Outline selection process timetable
1.4		NPSO Chair & CEO role advertisements
1.5		Appoint NPSO Chair
1.6		Create new NPSO Board
1.7		Appoint NPSO CEO
1.8		Make subsequent leadership appointments
2	**CMA consultation**	
2.1		Stage 1 review of the pre-filing notice by the CMA
2.2		Stage 2, if required, review by the CMA
2.3		CMA approval (mid-July 2017)
3	**Pre-project mobilisation requirements (Approvals)**	
3.1		Send PSO DG Final Report to BoE and PSR on 31/03/17
3.2		BoE and PSR provide response to the PSO DG Report
3.3		Achieve DG consensus on recommendations for PSO DG Final Report
3.4		PSO Boards agree recommendations outlined in PSO DG Final Report
3.5		PSO Member agree recommendations outlined in PSO DG Final Report
3.6		PSO DG discuss and agree funding & resourcing for implementation project
3.7		Secure mandate to mobilise project
4	**Project mobilisation**	
4.1		Agree mandate to mobilise and agreement to PID
4.2		Agree project leadership and accountability
4.3		Confirm project governance model for the implementation project
4.4		Confirm scope and timeline for implementation project
4.5		Confirm implementation project budget
4.6		Confirm implementation project team
5	**NPSO Hold Co and ICS Co set up and funding**	

Draft implementation plan: Summary of level 1 and level 2 activities		
Ref	**Level 1 Activities**	**Level 2 Activities**
5.1		Confirm funding commitments in principle
5.2		Confirm PSO Member agreement to set up project and initial funding
5.3		Appoint Chair of NPSO
5.4		Draft Articles of Association to allow a variety of funding mechanisms
5.5		Put funding mechanism for Stages One and Two in place
5.6		Create NPSO Hold Co, set up as a company limited by guarantee
5.7		Appoint CEO of NPSO
5.8		Bring actual funding for Stages One and Two into the NPSO
5.9		Draft modifications to scheme rules and membership agreements to allow company members to continue to participate in services without change while resigning their membership in the current PSOs.
5.10		Existing Members (Guarantors) of PSOs resign status from the PSOs and in return subscribe as Members (Guarantors) of the NPSO.
5.11		Admit NPSO Hold Co as the sole Member of the PSOs limited by guarantee.
6	**NPSO Board set up**	
6.1		Appoint NPSO Board
6.2		Hold initial Board meeting (key decisions e.g., corporate structure detailed design)
6.3		Agree corporate governance model
6.4		Put NPSO corporate governance in place, with Board meetings scheduled
7	**NPSO Management and Advisory Councils set up**	
7.1		Design management structure (Board decision)
7.2		Agree AGM Terms of reference
7.3		Set up AGM, with schedule in place
7.4		Set up End-user Council (assuming agreed by newly appointed NPSO Board)
7.5		Set up Participant Council (assuming agreed by newly appointed NPSO Board)
8a	**Consolidation Process**	
8.1a		Confirm legal steps to implement the structure for Stage One implementation
8.2a		Implement steps for NPSO Hold Co and ICS Co set up

Draft implementation plan: Summary of level 1 and level 2 activities		
Ref	**Level 1 Activities**	**Level 2 Activities**
8b	**Additional Members**	
8.1b		Identify additional Members
8.2b		Select additional Members meeting the criteria
8.3b		Additional Members assume Guarantor rights in the NPSO
8.4b		On-board additional Members
8c	**Responsibility Transfer**	
8.1c		Agree scope of DD
8.2c		Conduct DD
8.3c		Implement service and function integration
8.4c		System operator responsibilities transferred into NPSO
8.5c		Transfer of responsibility as payment system operator from PSO2 to NPSO
8.6c		Transfer of responsibility as payment system operator from PSO3 to NPSO
8.7c		Legal steps to effect the transfer of assets and liabilities from PSOs to NPSO (with the liabilities the responsibility of the NPSO from this point onwards) — this the transfer of the PSOs into the NPSO.
8.8c		Re-align organisational design
8.9c		Assess and address TUPE considerations
8.10c		NPSO running as the operator of the PSOs.
9a	**Organisation design & operating model (Stage One)**	
9.1a		Stage One organisation design
9.2a		Stage One operating model design
9b	**Organisation design & operating model (Stage Two)**	
9.1b		Stage Two organisation design
9.2b		Stage Two operating model design
10	**Integration of Support Functions**	
10.1		Confirm the design of integrated support functions to support the NPSO Board
10.2		Identify secondment roles within these integrated functions
10.3		Fill secondee roles with secondees from PSOs
10.4		Put secondment agreements in place between the PSO subsidiaries and NPSO Hold Co
10.5		Put letters in place between secondees and PSOs for the secondments

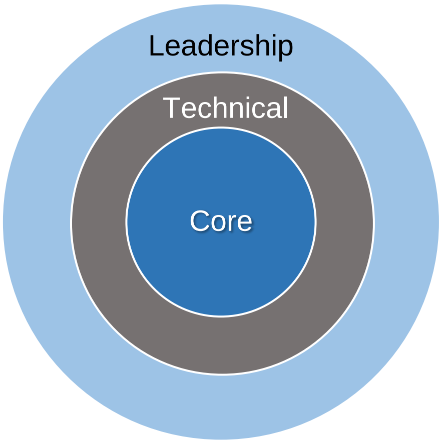
Draft implementation plan: Summary of level 1 and level 2 activities		
Ref	**Level 1 Activities**	**Level 2 Activities**
10.6		Implement initial stages of consolidation of frameworks
11	**Subsequent Phase Planning**	
11.1		Plan PSO system operator responsibility transfer
11.2		Build out capabilities for enhancement (e.g., R&I)
11.3		Agree the steps for the take on of additional functionality by the NPSO
12	**Improvements to Access (ISOC)**	
12.1		Assess status of existing rule book initiatives
12.2		Align existing initiatives, transfer to NPSO responsibility
12.3		Common rule book roadmap agreed
12.4		Design new entrant on-boarding
12.5		Implement new entrant on-boarding process
13	**Additional Functionality**	
13.1		Review and agree the potential transfer of additional functionality from other entities or projects into NPSO
13.2		Transfer of additional functionality — from other entities
13.3		Transfer of additional functionality — assume responsibility from projects
13.4		Develop common description(s) of existing products services
13.5		Develop new product and service process
14	**Communications**	
14.1		Project stakeholder communications
14.2		Internal communications
14.3		External communications/media
14.4		External web content
14.5		Identify and manage media risks
14.6		Branding

7.7 Leadership selection: Board competency matrix

Approach and Assumptions

The PSO DG commissioned a structured approach to the formulation of the Board competency matrix:

- Understood the Board competency frameworks of the existing PSOs
- Undertook benchmarking against a number of external organisations
- Designed the NPSO Board competency framework comprising three elements; leadership, technical and core competencies
- Developed a proficiency scale for use when prioritising competencies against specific roles



Leadership: competencies which are required to ensure the smooth running and strategic direction of NPSO. These competencies should be championed by the most senior leaders within NPSO.

Technical: competencies which are essential for the NPSO to operate smoothly. This enables efficient productivity and compliance to regulatory and legal requirements.

Core: competencies which are required by all employees within NPSO. These include behavioural attributes such as Integrity and Collaboration.

#	Proficiency Level	Description
1	Basic	Individual is aware of the skill and have a general understanding of the theory and application of the competency. They require supervision to work on simple tasks.
2	Competent	Individual has some practical work experience in the area. They still require moderate supervision but can work independently on simple tasks.
3	Experienced	Individual has had experience working independently on moderately complex assignments in this area and has the ability to support and guide others.
4	Advanced	Individual has had significant experience working and leading moderate to complex assignments in this areas. They are capable and may be responsible for the results of the wider team.
5	Expert	Individual is regarded as an expert or master in the competency. They develop, implement and advocate the processes and standards in the field.

The following competencies are the suggested competencies for the Selection Committee to consider when evaluating candidates for Board positions.

Leadership Competencies

Competency	Description
Strategic Vision	Capable of developing and implementing the strategic objectives of the NPSO. Holds a commercial outlook on the changing payments industry and is able to recognise the appropriate time to alter strategy in response to industry changes. Examples of Strategic Vision adoption include: Developing robust & resilient practices, being End-User focused, being agile and innovative and balancing accessibility improvements with protecting system Participants.
Business Acumen	A thorough understanding of the payments system operator key costs, revenue, regulatory and operational drivers in order to maximise the impact of the NPSO. Ensure the NPSO meets its purpose and strategic objectives in conjunction with best new practices in financial services.
Decision Making	Capable of taking action in situations of uncertainty and coming to the most optimal solution, having comprehensively evaluated a range of alternate options and demonstrated transparency of decision making where appropriate. Able to demonstrate why this is the best solution (with research, statistics and industry trends when available) and be ready to champion it in favour of inferior alternatives, to all levels of the NPSO.
Conflict Resolution	Capable of recognising potential issues of conflict and of acting impartially to resolve conflict as soon as perceived. Displays strong skills of empathy and humility when resolving complex problems. Acts transparently in all interactions. Is sensitive to core diversity and inclusiveness principles.
Influencing Others	A tenacity for understanding the best method of delivering a message or proposition to achieve the NPSO's desired outcome. Ability to reflect, consult and consequently achieve. Able to inspire where necessary in order to win the hearts and minds of stakeholders within the payments ecosystem.
Innovative Problem Solving	Acts an ambassador for change and possesses the skill to manage it effectively. This is important for the NPSO during its set up stage and whilst embedding the NPSO's culture and values. It is also important to maintain these skill throughout this initial period of transformation within the payments industry. Thinking 'outside of the box' to develop new solutions, or finding solutions to problems by redefining existing methods, both with the purpose of achieving an end goal unachievable by existing processes.

Technical Competencies

Competency	Description
Transformation and Change Management	Capable of steering and directing large scale transformational change at an industry level. Ideally has an understanding of what is required to set up a new entity and effect change while protecting the stability of critical services. Capable of developing a conducive environment for transformation by integrating end-to-end change management approaches, which are tailored to reflect the specific nature and scale of the change.
Regulation & Assurance	In-depth understanding of financial stability, systemic risk and financial market infrastructure within the payments industry. Highly skilled to engage with the regulator at a senior level. Assess the effectiveness of the NPSO's arrangements to deliver effective governance, oversight and controls in the business, and if necessary, to recognise and comply with these autonomously, as well as other core processes and policies which inform best ways of working given the unique context of this company.
Legal Capability	Capable of understanding the legal responsibilities of the NPSO and the payments industry. Must act in the best interest of the NPSO. Support and hold to account the executive management of the NPSO.
Operational Competency	Diligent in fulfilling the responsibilities of a board Member. Capable of operating effectively as an Executive of a major financial services organisation within the payment industry, whilst maintaining effective corporate governance arrangements and operating in a regulated environment. Keeping up to date with industry leading practices, research and innovation. Articulates industry knowledge to other board members and seeks to implement best practices with vigour over a timeline agreed unanimously by the NPSO board.
Technical Competency	Possesses the technical knowledge to exercise leadership. Understands the evolving payments industry and areas such as payment platforms, standards, APIs, cyber security, and major technical infrastructure platforms. Must demonstrate senior experience in the payments industry and as a Company Director. Capable of championing innovation and acting as a dynamic leader in a complex and technical business which is going through a period of industry-wide transformation.

Core Competencies

Competency	Description
End-User Focused	Capable of considering the End-User in decision making. Actively connecting with End-User and Participant representatives to ensure the NPSO as an organisation, and the payments services provided by the NPSO, continue to be innovative and fit for purpose for all stakeholders of the payments ecosystem. Constantly understand and review End-User requirements and responsively innovate the NPSO's offering to ensure it is continually fit for purpose. Ability to balance risk between different types of End-Users, bearing in mind the needs of more vulnerable people; and understand the full implications of services as experienced by End-Users.
Risk Management & Compliance	Capable of managing systemic risk within the 'Governance and Risk Management Framework' set out by the Board of the NPSO. Holds a strong understanding of risk and compliance in the context of payments services operators. Able to identify, highlight and manage potential risks detrimental to the NPSO or Participants in the broader payments ecosystem.
Integrity	Capable of playing an active role in supporting the Board in setting and monitoring NPSO's values and standards. Transparency in action, honest, leads by example, raises issues and solves them immediately, reflective learner, seeks and takes feedback from all staff ranks, prioritising NPSO's reputation over personal gain, acting ethically at all time regardless of technicalities which consider such action as being legal. Sensitive to conflicts of interest, both real and perceived.
Relationship and Team Management	Capable of building strong working relationships across diverse functional and business leadership teams. Capable of influencing key internal and external stakeholders at an executive and board level. Capable of cooperating at all levels and acting consultatively. Capable of attracting, managing and leading excellent people at all levels. Capable of effectively communicating both verbally and in writing, displaying emotional intelligence, managing conflict, supporting individual development and creating highly effective team dynamics.
Collaboration	Act and be conscious of the NPSO's shared purpose in all dealings. Think about the end result of an action, and act in the way which will be most beneficial to the interests of all stakeholders. Collaborate across the payments ecosystem and leverage the specialist payments knowledge in the NPSO for the benefit of all.

7.8 PSO DG stakeholder communications approach

The diagram below shows how the PSO DG sought to comply with its responsibility to communicate with stakeholders, including PSO members.

Engagement with PSO Boards and management
- Via the three Chairs of BACS, C&CCC and FPS respectively
- Additional collective meetings to pro-actively engage with senior leadership of BACS, C&CCC, FPS and UKPA

Publicly Available Info
- Publication of material on the PSO Delivery Group page of the PSR web site

Roundtables
- Roundtables for PSO members and PSO SLTs were held over the period of preparation of the report

Engagement with PSO Members
- Via the three Chairs of BACS, C&CCC and FPS respectively, coordinating between themselves where necessary, regarding members who are common between them

PSO Delivery Group

Stakeholder Engagement & Communication

Engagement with broader stakeholder community
- Via three Delivery Group Members representing End-Users, as representatives of either the PSF or Payments UK

Communication with PSR panel
- PSO DG chair meeting with PSR panel

Engagement with regulators and policy setters
- Observers present at Delivery Group Meetings
- Reporting from PSO DG Chair to the PSO Co-ordination Group

Communication with PSF
- Dialogue between chair of PSF and PSO DG chair
- Attendance by PSO DG chair at PSF meetings

7.9 Summary of project governance documents

During the course of the project, the PSODG has ensured that the correct and appropriate records have been retained at all times, including:

- Status Reports (weekly)
- Risks Logs (weekly)
- Register of Inputs (83 documents in total)
- Meetings Log
- Definitions Log
- Suggestions Log
- Project Timeline (for January – March)
- Staff FAQs
- Member/Shareholder FAQs
- Stakeholder Engagement Event schedule
- Stakeholder Engagement Event delegates lists

In addition, the following records have been recorded and retained as part of the duties of the Secretariat:

- PSODG Meetings Agendas
- PSODG Meeting Papers for meetings
- PSODG Meeting Summaries have been prepared by the PSR and are made available on the Delivery Group page of the PSR web site