FINANCIAL CONDUCT AUTHORITY
PAYMENT SYSTEMS REGULATOR

Market review into the ownership and competitiveness of infrastructure provision

**MR15/2.3**

# Final report

July 2016

In this final report we set out our view on the ownership and competitiveness of infrastructure provision for the Bacs, FPS and LINK systems.

We also consider potential remedies which we will develop and evaluate over the coming months.

We will continue to engage with stakeholders in the coming months to develop our remedies. In this process we will consider the stakeholder views we have already received as well as any additional views.

Stakeholders are invited to submit any responses to us by 22 September 2016. You can send your views by email to infrastructurereview@psr.org.uk.

You can also respond in writing to the address below (although we ask all respondents to also provide electronic Word and PDF versions of their response).

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Canary Wharf
London E14 5HS
Email: infrastructurereview@psr.org.uk

Generally we will seek to publish views or submissions in full or in part. This reflects our duty to have regard to our regulatory principles, which include those in relation to:

- publication in appropriate cases
- exercising our functions as transparently as possible

As such, we would ask respondents to minimise those elements of their submission which they wish to be treated as confidential – we will assume consent for us to publish material which is not marked as confidential. If respondents include extensive tracts of confidential information in their submissions, we would ask that they submit non-confidential versions which they consent for us to publish. We will also not accept blanket claims of confidentiality, and will require respondents to identify specific information over which confidentiality is claimed, and to explain the basis on which confidentiality is sought.

Respondents should note that we will not disclose confidential information that relates to the business or affairs of any person, which we receive for the purposes of our functions under the Financial Services (Banking Reform) Act 2013 (FSBRA), unless:

- The information is already lawfully publicly available.
- We have the consent of the person who provided the information and, if different, the person to whom it relates.
- The information is published in such a way that it is not possible to ascertain from it information relating to a particular person (for example, if it is anonymised or aggregated), or there is a 'gateway' permitting this disclosure. Among the gateways is the 'self-help' gateway whereby the PSR will be able to disclose confidential information to third parties to enable or help it to perform its public functions. Those receiving information disclosed under the gateway are still bound by the confidentiality regime.

The places in this report where confidential material has been redacted are marked with a [✂].

We have redacted the names of most stakeholders throughout this report where we report feedback from, and evidence provided by, relevant parties. For readability purposes we have not inserted scissors in each location where we have deleted footnotes or other text which identifies the source of the information or views summarised in the report.

You can download this interim report from our website:
https://www.psr.org.uk/psr-publications/market-reviews/MR1523-final-report-infrastructure-provision

# Contents

# 1. Executive Summary

This document sets out our view on the ownership and competitiveness of infrastructure provision.

We have found that there is no effective competition for the provision of UK payments infrastructure for the three main interbank payment systems (Bacs, FPS and LINK). There is a lack of incentives for operators to look for alternative infrastructure providers that could better meet the needs of their service-users. We consider that this is partly due to the fact that the operators and the infrastructure provider are both owned and controlled by the payment service providers (PSPs) who use them. We have also found that there are barriers to entry that prevent or deter potential central infrastructure providers from competing to provide these services.

We also consider potential remedies which will be developed and evaluated over the coming months. We welcome input on these.

## The importance of the UK payments sector

**1.1** Payment systems form a vital part of the UK's financial system – they underpin the services that enable funds to be transferred between people and institutions. In 2015, these payment systems processed almost 21 billion transactions worth around £75 trillion.

**1.2** Well-functioning payment systems contribute to the country's economic productivity by reducing the costs of transactions, improving financial markets' liquidity and enhancing the financial sector's stability. There have been many studies over the last 15 years by government and regulatory bodies that have examined UK payment systems. The Cruickshank Report in 2000 noted that the ownership and governance of the UK payment systems was restricting innovation, and advocated a separation of infrastructure providers and operators. The Office of Fair Trading (OFT) later noted that the proposed separation seemed unlikely to have the desired effect, because the ownership profile of operator and infrastructure provider would remain the same. Further studies sought to address these issues, but were not effective. The government made it clear that the current system was not adequately meeting objectives to promote and develop new and existing payment systems, and to facilitate competition.[1] This led to the creation of the PSR.

## Our market review

**1.3** In June 2015, we published our terms of reference[2] outlining our decision to proceed with a market review of the supply of infrastructure services. As explained in our terms of reference, we have statutory objectives to promote effective competition and innovation – in the interest of service-users – in the market for payment systems and for the services the systems provide – including services between operators, PSPs and infrastructure providers.

1 *Setting the strategy for UK payments,* HM Treasury, (July 2012).

2 PSR, PSR MR15/2.1, *Final terms of reference: market review into the ownership and competitiveness of infrastructure provision*, (2015): https://www.psr.org.uk/psr-publications/market-reviews/mr1521-final-terms-reference-infrastructure

**1.4** In February 2016, we published our interim report which set out our initial findings on the supply of infrastructure services and we considered options for potential remedies. This final report sets out our final findings and, where relevant, additional evidence received from stakeholders. We also outline remedies on which we seek views and which we will further develop over the coming months.

**1.5** This review forms part of our wider work to help encourage competition, innovation and increased service standards across the payments industry. There are a number of interactions between this review and our other initiatives – most notably the Payments Strategy Forum (the Forum) which we created to develop a strategy for payment systems in the UK. The Forum leads on a process to identify, prioritise and help deliver initiatives where it is necessary for the payments industry to work together to promote collaborative innovation.

**1.6** The payment systems infrastructure is the hardware, software, secure telecommunications network and operating environments that support the clearing and settlement of payments. It is important that infrastructure services are reliable and efficient, and deliver the best outcomes for service-users. Three interbank payment systems – Bacs, Faster Payments Scheme (FPS), and LINK – all share the same infrastructure provider, VocaLink.

**1.7** Competition for infrastructure services has the potential to improve efficiency, and can lead to lower prices and higher quality to the benefit of PSPs and their customers. It also provides incentives for infrastructure providers to innovate to attract and retain their customers, which gives rise to dynamic benefits in terms of improved products and services. This ongoing process of innovation helps ensure that the products and services offered meet the needs of service-users as these evolve.

**1.8** Innovation in infrastructure could have many benefits for PSPs and, ultimately, their customers. Examples include additional functionality (such as better liquidity management tools), faster and more flexible service, and other services which in turn could spur more competition and innovation downstream.

## Our key findings

### Competition in the provision of central infrastructure services

**1.9** We find there is currently no effective competition in the market for the provision of central infrastructure services for Bacs, FPS and LINK.

**1.10** Because products and services in this market are bespoke, operators and PSPs cannot easily compare alternative offerings. Due to this lack of transparency, procurers and providers must exert some effort to establish what alternative providers and potential services are available and adequately compare these. We find that the operators (as current procurers) have not periodically run competitive procurement processes or even sufficiently tested the market when reprocuring core infrastructure services. As a result, the incumbent provider, VocaLink, has faced limited competitive pressure and reduced incentives to provide more efficient and innovative services. We also find that the operators do not have a strong incentive to drive effective competition, while direct PSPs do not have a strong incentive to encourage the operators to do so.

**1.11** Most operators and direct PSPs are satisfied with the value for money, quality of service and innovation they receive from VocaLink. However, we do not observe processes that would provide confidence that the outcomes observed meet the current and ongoing needs of all service-users. This also means that the full ongoing benefits of competition are unlikely to be achieved. We find that in the current market structure for core services, the incentives to innovate are not strong. Furthermore, there is scope for effective competition to drive improved outcomes in terms of value for money, service quality and innovation.

**1.12** We find a number of barriers to effective competition. The lack of competitive procurement exercises by the operators is a barrier to entry that prevents potential providers from competing. There is evidence that a number of potential providers are interested in competing. We also identify the use of bespoke messaging standards as a barrier to entry.

**1.13** A limited number of large PSPs own VocaLink and are on the governing bodies of Bacs, FPS and LINK. We find that the four largest VocaLink shareholders together control VocaLink and the operators in matters where their interests are aligned.

**1.14** This finding of joint control has two components. Firstly, the four largest shareholders in VocaLink, when acting collectively, have the ability to take (or block) key decisions of VocaLink and each of the operators. Secondly, the four largest shareholders' interests are aligned in (i) matters concerning stability, security and resilience; and (ii) matters that are related to exposing VocaLink to competition. We consider it likely that the four largest VocaLink shareholder PSPs would act in concert in matters where they have a common interest.

**1.15** We find that, because of the joint control that the four largest shareholders exercise, the current ownership and governance arrangements are likely to reduce the level of competition in the market for the provision of central infrastructure services. This is for the following three reasons:

i. **The four largest VocaLink shareholders have an interest in protecting VocaLink from competition.** Exposing it to competition would put at stake VocaLink's value, and could result in the owners facing calls for capital. Exposing VocaLink to competition [✂]. Their control of the operators allows them to protect VocaLink from competition for the provision of services to Bacs, FPS and LINK. VocaLink's attempts to use the links between its shareholders and the operators to protect its position potentially exacerbates the owners' incentives to protect VocaLink from competition.

ii. **The four largest VocaLink shareholders are unwilling to turn to infrastructure suppliers other than VocaLink as they perceive there is a benefit of using a supplier they control.** They see their ownership and influence over VocaLink as a way of ensuring stable, secure and resilient services. Their control of the operators in these matters allows them to ensure that VocaLink continues to be the supplier.

iii. **Current ownership and governance arrangements discourage alternative providers of central infrastructure services from entering the UK market.** Some alternative infrastructure providers believe VocaLink's owners would favour VocaLink in a competitive procurement. Their control of the operators allows these owners to favour VocaLink in a competitive procurement.

**1.16** We acknowledge that the current ownership arrangements can generate some benefits, for example in terms of stability. However, we note that the corresponding levels of stability could potentially be achieved by other means such as through oversight from the Bank of England, developing better contract specifications, and providers' own need to preserve their reputation.

## Competition in the provision of other infrastructure services

**1.17** Overall, we find there is currently effective competition in the provision of gateway solutions. The evidence shows that PSPs have enough provider choice and do not all use the same provider. The costs and risks of switching gateway providers are not a high barrier to switching. While PSPs do not switch often, they've done so when there has been a positive business case for it. VocaLink does not appear to gain a competitive advantage for gateway solutions due to its role as the central infrastructure provider. We acknowledge stakeholders' views on transparency around the BASS accreditation process. However, we find that the accreditation process or costs are not a high barrier to entry. Nonetheless, we welcome BPSL's plan to review its accreditation processes.

## Potential remedies

**1.18** As a result of our findings, we are considering the following potential remedies to address the problems in the provision of infrastructure services for Bacs, FPS and LINK. They are proposed as a package. We propose:

a. **Competitive procurement exercises are undertaken:** We consider that this will increase competition in the provision of central infrastructure services, which is likely to benefit service-users by introducing the potential for more efficient and innovative service offerings than are available under the current arrangements. There are a number of ways this could be implemented and the options we are currently considering are discussed in Chapter 8. These range from issuing guidance, through to requiring operators to follow a prescribed process set out by the PSR. In each case, we also believe that there is less potential benefit in conducting a procurement exercise to replace the existing infrastructure on a like for like basis. This is because a like for like replacement of existing infrastructure limits the ability to introduce innovative solutions.

b. **Enhanced interoperability, including a common international messaging standard, for Bacs and FPS:** This is to address the barrier to entry due to the lack of common international messaging standards in the UK, and to facilitate a wider choice of provider. It could also enhance interoperability between systems as well as enable UK payment systems to evolve. Adoption of a common international messaging standard for LINK may have unintended consequences and more limited benefits compared to Bacs and FPS. As part of our remedies design we will consider further whether such a remedy is appropriate also for LINK. We recognise the scope and timing of potential implementation of this remedy are particularly important to the level of costs and which organisations bear these costs. The Forum published its Draft Strategy on 13 July 2016 which sets out its vision for the type of messaging standard to be adopted and the simplification of rules. We will continue to work with the Forum to ensure that we are aligned in the implementation of any proposed remedies. The Forum's Final Strategy is expected in November 2016. We also recognise that there are differences between the systems such that there may not be a single solution for the three payment systems.

c. **Divestment by the four largest VocaLink shareholders of their interest in VocaLink:** This is to address the operators' lack of incentive to consider alternative infrastructure providers arising from common ownership and control of operators and the infrastructure provider, as well as potential bidders' perceptions about the likelihood of winning a competitive procurement exercise.

**1.19** We note that MasterCard has recently agreed to acquire VocaLink, subject to regulatory approval and other customary closing conditions.[3] This transaction will require clearance from the relevant merger authorities. We are not a relevant merger authority and do not make any comment here on that assessment. However, with regard to the competition issues we have identified in this review, in particular ownership and control issues discussed in Chapter 6, we note that it appears this transaction would change the ownership arrangements of VocaLink in a way which could address the issues we have identified as causing a restriction of competition currently.

**1.20** We consider that these remedies working together have the potential to promote our statutory objectives, and in particular to increase competition for the provision of infrastructure services. This can help promote more innovation in payment systems, and therefore promote the interests of service-users.

**1.21** We welcome views by 22 September 2016 and we plan to engage with stakeholders to design and evaluate effectiveness and proportionality of our remedies package over the coming months. We expect to issue a consultation later in the year on our draft remedies decision. In proposing

3 http://investor.mastercard.com/investor-relations/investor-news/press-release-details/2016/MasterCard-Announces-Acquisition-of-VocaLink/default.aspx

remedies focused on the issues identified in this market review, we are also mindful that alternative structures may develop in the future which differ from the current predominant three-party structure of PSP, operator and infrastructure provider. Our remedies are intended not to preclude such developments. We will give further consideration to the appropriate mechanism to examine potential alternative models, such as competition in the market.

## What do you need to do next?

**1.22** We welcome your feedback on our high level options for the potential remedies. If you would like to provide comments, please email these to us by 5pm 22 September 2016 at infrastructurereview@psr.org.uk, or write to the address on page 2.

**1.23** We will consider your comments on this report when preparing our remedies consultation, which will be published later this year. We expect this will set out our draft remedies decision, including remedy design and our assessment of the effectiveness and proportionality of the remedies.

# 2.
# Our Approach

**2.1** In this chapter, we set out:

- why we are conducting this review
- the scope of the review
- why we are publishing this final report
- the evidence we gathered to support our analysis

## Why we are conducting this review

**2.2** In November 2014, we published our consultation paper on a new regulatory framework for payment systems in the UK.[4] During this consultation, some stakeholders raised concerns relating to the overlapping vertical relationships and common ownership of the operators and the infrastructure provider of payment systems and its effects on incentives to compete.

**2.3** As explained in our June 2015 terms of reference[5], we have a statutory objective to promote effective competition in the markets for payment systems and for the services provided by those systems, including between operators, payment service providers (PSPs) and infrastructure providers. We also have statutory objectives to ensure that payment systems are operated and developed in a way that considers and promotes the interests of service-users and to promote the development of and innovation in payment systems, in particular the infrastructure used to operate those systems.

**2.4** Currently, a small number of PSPs own and/or govern[6] the Bacs, FPS and LINK payment systems and the central infrastructure for these systems. These PSPs are mainly banks and building societies which are also the main users of these payment systems. These arrangements are perceived to have resulted in the development of relatively robust and resilient payment systems. Such arrangements may provide incentives to keep infrastructure services costs down. However, concerns have been raised that they may also enable some PSPs to exert greater influence over infrastructure development and operation in a way that is in their own interests rather than in the interests of all service-users. There is more detail on the structure and evolution of UK payments systems in Chapter 3.

**2.5** We have previously sought to address some of the concerns that relate to the functions of operators through our general directions to operators of the interbank payment systems. These include:

a. General Direction 4 requiring interbank operators (except Northern Ireland Cheque Clearing (NICC)) to ensure appropriate representation of service-users' interests in the decision-making processes of their governing bodies.

4 PSR, PSR CP14/1, *A new regulatory framework for payment systems in the UK*, (November 2014): https://www.psr.org.uk/psr-publications/consultations/consultation-paper-141

5 PSR, PSR MR15/2.1, *Final terms of reference: market review into the ownership and competitiveness of infrastructure provision*, (June 2015): https://www.psr.org.uk/psr-publications/market-reviews/mr1521-final-terms-reference-infrastructure

6 BPSL, FPSL and LINK are membership organisations and do not issue shares.

b. General Direction 5 requiring interbank operators (except NICC) to ensure any individual acting as director of an operator must not simultaneously act as a director of a central infrastructure provider to the payment system. This is to address any potential conflict of interest which could stand in the way of new competing and innovative infrastructure providers having a fair opportunity to bid and win contracts and to not distort the competitive tendering process.

c. General Direction 6 requiring interbank operators (except NICC) to publish minutes of their governing body, including votes. We expect this increased transparency about decision-making will enable service-users to assess whether interbank operators are appropriately considering their interests when taking decisions.

**2.6** As explained in our terms of reference, we carried out this market review to understand whether the current provision of infrastructure services in the UK interbank payment systems deliver good outcomes for service-users. This review explores how the ownership arrangements and vertical relationships of interbank payment systems and infrastructure providers affect decision making, innovation and the competition dynamics within the market.

## Scope of the review

**2.7** This review considers the supply of infrastructure services related to interbank payment systems, focusing on Bacs, FPS and LINK's clearing of payments. Clearing is the process that transmits, validates, routes, reconciles and in some cases confirms a payment instruction or transfer order (i.e. a promise to pay someone).

**2.8** We also look at other infrastructure services that are provided at the boundary between PSPs and clearing functions, namely:

- provision of databases services: – such as the Bank Reference Data, Customer Reference Data and Extended Industry Sort Code Database which include data needed to validate and route payments in the correct way
- communication channels services – ranging from standard telecommunication lines to more complex channels such as the Enhanced Transmission Service and SWIFTNet Transmission Service (ETS and STS))
- gateway services – gateways are typically the entry point to the communication channel between the PSP (or any third-party service provider such as a bureau) and the central clearing infrastructure
- accreditation services – where individual providers are approved to deliver particular functions within the payment systems
- other services between central clearing functions and direct PSPs

**2.9** The review also covers other aspects of infrastructure services in interbank payment systems. These include services supplied by providers of central clearing services on behalf of PSPs, such as ATM (Automated Teller Machine) managed services and other similar services.

**2.10** The emphasis of our review is on those services related to Bacs, FPS and LINK for the reasons set out in our terms of reference.[7]

7 PSR, PSR MR15/2.1, page 7, paragraphs 1.16 to 1.17.

2.11 The key questions that we explored during the review are:

- Is competition effective in the provision of infrastructure services in interbank payment systems, and if not, what are the reasons for this?
- What is the likelihood of entry or expansion in respect of the provision of infrastructure services?
- How do demands from interbank payment system operators as customers of infrastructure services providers; demand from PSPs as customers of interbank payment system operators; and demand from ultimate end-users of interbank payment systems, affect competition and innovation in the provision of infrastructure services related to interbank payment systems?
- What could be the benefits of greater levels of competition and innovation in the provision of infrastructure services in interbank payment systems?
- How do the current ownership arrangements of infrastructure providers affect competition and innovation in the provision of infrastructure services related to interbank payment systems?

## Why we are publishing a final report

2.12 We are publishing this final report to set out our findings. These take into account all evidence and information provided by stakeholders including the responses we received following our February interim report. We also want to give all interested parties an opportunity to comment on the remedies we are considering.

2.13 In this report, we set out our observations on:

1. the role of operators and PSPs in driving effective competition and innovation
2. competition in the provision of central infrastructure services
3. competition in the provision of other infrastructure services
4. how the current ownership arrangements affect competition and innovation
5. potential remedies that could improve competition and innovation in the interests of service-users

2.14 In Chapter 9 we describe the next steps of this market review.

## The evidence gathered to support our analysis

2.15 To gain a better understanding of the market in the UK, we analysed a wide range of data and information. This included the responses to our interim report. The non-confidential versions of those responses have been published on our website so all stakeholders can consider the views of other parties. We also met with operators, infrastructure providers, PSPs, independent ATM deployers (IADs), fintechs and received input from interested parties in responses to our terms of reference. We would like to thank all participants for their time and for their constructive engagement to date. A full list of those who contributed to the review can be found in Annex 9.

### Requests for Information

**2.16** To understand both the demand side and supply side of the market, we requested quantitative and qualitative data from PSPs, operators and VocaLink. Through requests for information we gathered information and views on:

- the pros and cons of the current ownership arrangement of VocaLink
- the price and quality of infrastructure services VocaLink provides (both core services and non-core services)
- the current drivers of innovation within central infrastructure
- the current level of competition and tendering processes
- the potential costs and benefits of alternative infrastructure models/provision
- contract negotiations between operators and VocaLink
- VocaLink's strategy, governance structure and cost of business

**2.17** The detailed questionnaire can be found in Annex 6.

### Meetings with PSPs, infrastructure providers and fintechs

**2.18** Over the course of the market review we have had more than 60 meetings with PSPs, operators, IADs, associations and infrastructure providers. We also organised a round-table to gather views from the fintech community as well as a workshop to discuss feedback on the potential remedies detailed in the interim report.

### Desk-based research

**2.19** Desk-based research has provided us with the information on the development of payment systems, regulatory changes and issues previously identified. We have also done some research on other payment systems to shed light on the form and possibility of alternative industry structures. A summary of these can be found in Annex 5.

### International Comparison

**2.20** As part of this review we also commissioned a report by Lipis Advisors providing a fact-based comparison of payment systems ownership and access models between the UK, 12 other countries and one region.[8] This informed our thinking by helping us to understand the market structure, regulation, governance and ownership, as well as innovation development internationally. The results of this work were published separately alongside the interim report and can be found at https://www.psr.org.uk/psr-publications/market-reviews/MR1522-lipis-report.

8 The countries included in this study are Australia, Brazil, Canada, Denmark, Japan, New Zealand, Belgium, Germany, Italy, Singapore, Sweden, United Kingdom, and United States of America. The Single Euro Payments Area (SEPA) was also included in the research.

# 3. Market background

Payment systems form a vital part of the UK's financial system as they can contribute to the country's financial stability and economic growth. In the UK there are a number of payment systems. These involve participants such as end users, payment service providers (PSPs), payment system operators, central infrastructure providers and gateway services and solutions providers. The payment system operators and the central infrastructure provider have a key role in ensuring good outcomes for users. We explain the role of each of these participants and how the systems have evolved over time.

UK payment systems can be divided into interbank payment systems and card payment systems. This market review concentrates on three interbank payment systems – Bacs, FPS and LINK – and their central infrastructure provider VocaLink. In 2015 these payment systems were responsible for more than ten billion transactions involving the movement of over £5.5 trillion.

The current make-up of these three payment systems is the result of a series of changes over time. Many of these changes have been driven by regulatory intervention, while others happened naturally within the industry. Regulatory intervention has looked at addressing concerns around how the lack of competition and innovation has affected these systems and focused on governance.

## Introduction

**3.1** In this chapter we give an overview of the payment systems in the UK, focusing on Bacs, FPS and LINK. We also look at competition issues in the market for infrastructure services for these systems – including some regulatory interventions that have already been introduced by other authorities.

**3.2** In this chapter we set out:

- why payment systems are important
- the main UK payment systems
- recent trends for Bacs, FPS and LINK
- the main players in a payment system
- who PSPs are
- the role of operators and their procurement function
- the role of the central infrastructure provider and the services it offers
- VocaLink's business model
- the origin and evolution of Bacs, FPS and LINK

## Why payment systems are important

3.3 Payment systems form a vital part of the UK's financial system and are critical to the economy. In 2015 UK payment systems dealt with almost 21 billion transactions worth around £75 trillion.[9,10]

3.4 Well-functioning payment systems reduce the cost of transactions, improve the liquidity of financial markets and enhance the stability of the financial sector. In contrast, ineffective and inefficient payment systems can severely undermine the stability and developmental capacity of a country and its economy. These could result in inefficient use of financial resources, inequitable risk-sharing among market participants, losses for participants and a loss of confidence in the financial sector.

3.5 Well-functioning payment systems also contribute to a country's financial stability and economic growth. Failures or disruptions of a payment system could destabilise financial markets and cause widespread economic disruption.

## Main UK payment systems

3.6 Payment systems support the services that enable money to be transferred between people, businesses, and institutions. There are a number of payment systems in the UK.

3.7 Currently, each UK payment system supports a different kind of payment service. Broadly, they can be divided into interbank payment systems and card payment systems.

### Interbank payment systems

- **Bacs** provides two main payment instruments:
  - Direct Debit (a 'pull' payment used, for example, to pay bills)
  - Bacs Direct Credit (a 'push' payment used, for example, to pay employee salaries and benefits)

  Its operator is Bacs Payment Schemes Ltd (BPSL) and its central infrastructure services provider is VocaLink.[11]

- **Cheque and Credit (C&C)** processes cheques and other paper instruments in England, Scotland and Wales.

Its operator is the Cheque and Credit Clearing Company Ltd (C&CCCL). The members of C&C have outsourced many of the processes associated with the clearing of these instruments to two commercial providers, iPSL and Hewlett Packard Enterprise Services (HPES).

The industry is in the process of implementing a new image-based clearing system for cheques, which will use a new single central infrastructure supplied by a third-party provider selected at the end of a procurement process that has been run in the scheme.[12,13]

9 PSR analysis of payments statistics, Payments UK, *UK Payment Markets-Summary* (2016), p.8: http://www.paymentsuk.org.uk/sites/default/files/publication-free/UK%20Payment%20Markets%20Summary%202016%20-%20Free%20Download.pdf

10 Payments UK, *Annual Summary of Payment Statistics* (2015): http://www.paymentsuk.org.uk/sites/default/files/Annual%20Summary%20of%20Payment%20Statistics%202015_0.pdf

11 For roles of the central infrastructure provider, see paragraphs 3.29 to 3.33.

12 C&CCC, *Cheque imaging* available at: www.chequeandcredit.co.uk/cheque_and_credit_clearing/cheque_imaging/

13 Cheque and Credit Clearing Company, *Board Minutes* (10 December 2015): http://www.chequeandcredit.co.uk/sites/default/files/cccc_board_minutes_10_december_2015.pdf

- **CHAPS** is the UK's high-value sterling interbank payment system, where payments are settled over the Bank of England's Real-Time Gross Settlement (RTGS) system. It processes domestic and international wholesale payments (money market transactions and the sterling leg of foreign exchange transactions) and certain retail payments, such as house purchases.

  Its operator is CHAPS Clearing Company Ltd (CHAPS Co) and the central infrastructure services provider is the Bank of England.

- **Faster Payments Service (FPS)** provides near real-time payments, one-off forward-dated payments and standing orders. Virtually all internet and telephone banking payments in the UK are now processed through FPS.

  Its operator is Faster Payments Scheme Ltd (FPSL) and the central infrastructure services provider is VocaLink.

- **LINK** enables payment account holders to take cash out (among other activities) using the LINK network of ATMs.

  The Link Scheme Ltd (LSL) was incorporated in December 2014 to become the regulated incorporated body for the Link Scheme. LSL is the operator of the LINK payment system and the central infrastructure services provider is VocaLink.

- **Northern Ireland Cheque Clearing (NICC)** processes cheques and other paper instruments in Northern Ireland.

  The operator is Belfast Bankers' Clearing Company Ltd (BBCCL). NICC has no central infrastructure provider since its members exchange payments bilaterally.

## Card payment systems

**3.8** Card payment systems enable individuals and organisations to make card and card-based payments – for example, debit, pre-paid and credit cards.

**3.9** The main card payment systems in the UK are MasterCard and Visa. They both operate their respective payment system and underlying infrastructure themselves.

## Recent trends for Bacs, LINK and FPS

**3.10** This review is focused on the supply of infrastructure services related to interbank payment systems. In particular we are focusing on Bacs, FPS and LINK.

**3.11** In 2015 Bacs, FPS and LINK were responsible for more than ten billion transactions involving the movement of over £5.5 trillion.[14]

**3.12** To understand how Bacs, FPS and LINK are relevant to UK consumers, it is useful to examine trends over the last ten years. These are summarised in Figure 1.

14 Payments UK data, *Historical monthly statistics*: paymentsuk.org.uk/industry-information/free-industry-statistics and data from LINK, *Statistics*: http://www.link.co.uk/about-link/statistics/

## Bacs

**3.13** Between 2005 and 2009, the average annual volume growth for Bacs transactions was 4.2%, but it was 0.7% between 2010 and 2014. However, in 2015 transactions grew by 4.1%, to 6.08 billion.[15]

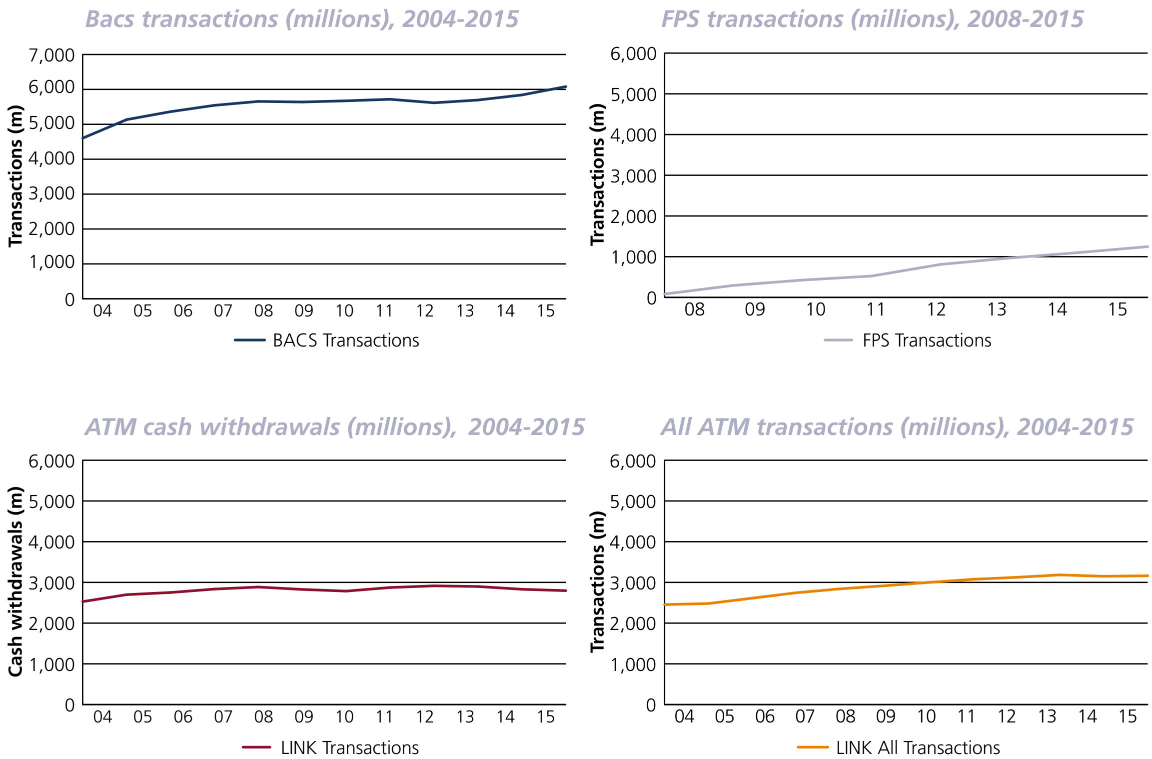
## LINK

**3.14** Between 2005 and 2009, withdrawals from cash machines grew on average by 2.3% per annum. Between 2010 and 2014 growth was stagnant overall: withdrawals increased between 2010 and 2012 and then dipped from 2012.[16] LINK cash withdrawals decreased by 0.5% in 2013, by 2.3% in 2014 and by 1.2% in 2015, to £2.79 billion.[17] However, the number of all ATM transactions has increased slowly but steadily in recent years, going from 3.07 billion in 2011 to 3.16 billion in 2015.[18]

## FPS

**3.15** FPS processed over 1.2 billion payments in 2015, a growth of 13.3% compared to 2014. More consumers are using FPS each year, which might be expected considering that FPS was launched only in 2008.[19]

***Figure 1: Number of transactions for Bacs, FPS and LINK***




*Source: PSR analysis of Payments UK data and data from LINK*

**3.16** To summarise, the use of electronic payments is increasing. In particular, consumers increasingly use real-time or same-day payment services and so FPS transactions are growing. ATM and Bacs transactions are also increasing, even though they are already well established.

15 Payments UK, *Historical Monthly Statistics*: http://www.paymentsuk.org.uk/industry-information/free-industry-statistics

16 LINK, *Statistics*: http://www.link.co.uk/about-link/statistics/

17 LINK, *Statistics*: http://www.link.co.uk/about-link/statistics/

18 The number of all ATM transactions include balance enquiries and rejected transactions made through the LINK network, but do not include transactions made by customers at their own banks' or building societies' ATMs. LINK, *Statistics*: http://www.link.co.uk/about-link/statistics/

19 Payments UK data, *Historical monthly statistics.*

## Main participants in a payment system

**3.17** A payment system involves several participants. The party making the payment is the payer and the party who receives the payment is the payee. The payer and the payee are both end users of the payment system and include individuals, such as consumers, and organisations such as businesses, corporations and the government.

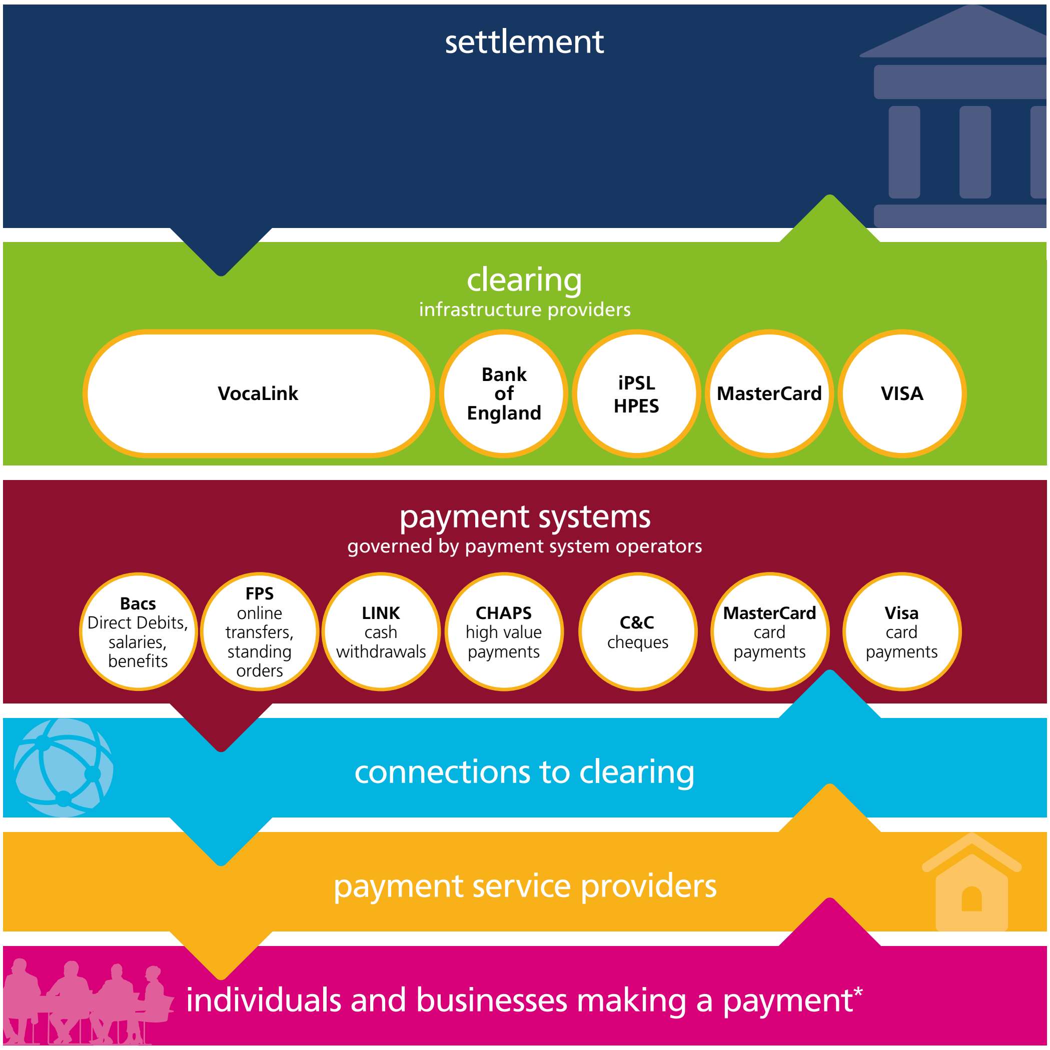
**3.18** Figure 2 provides an overview of the value chain of the main UK payment systems.

**3.19** This review focuses on the middle section of this value chain, namely:

- PSPs
- operators
- the central infrastructure provider

**3.20** The following sections describe the roles they play.

***Figure 2: Value chain of the main UK payment systems***




* Many businesses connect directly into the clearing functions for Bacs and FPS, but this is not represented on this simplistic diagram.

## Payment service providers

**3.21** Financial services firms that provide payment services, known as payment service providers (PSPs), are often credit institutions such as banks and building societies. These are authorised to hold deposit accounts and so have customers who need to make payments into and out of their accounts on a regular basis. In most cases, end-users have a contractual relationship with the PSP executing payment transactions on their behalf. The PSP will initiate the payment instruction and execute the payment on behalf of its customer. Credit unions, authorised payment institutions (APIs), small payment institutions (SPIs) and electronic money institutions are also PSPs.

## Payment system operator

**3.22** How a payment system works is based on a set of rules governing, for example, the payment processing cycle and the responsibilities of the parties in the process. The rules also cover technical standards, such as the format for exchanging electronic messages for processing payments. In the UK, operators are currently responsible for setting these rules. They also determine the functional and operational requirements that the infrastructure provider must meet. The role played by operators in other countries differs from that in the UK model.

**3.23** At the moment, for Bacs, FPS and LINK, the operator[20]

- is the custodian of the payment system's rules and technical standards
- manages and operates the payment system
- must comply with regulatory aspects governing the payment system
- determines access criteria and the application process for joining the payment system
- procures the central infrastructure for the payment system

**3.24** We give more details around the UK operators' current functions in Box A. The function of the current operators that is most relevant to this market review is the one concerning the procurement of central infrastructure services (see paragraphs 3.25 to 3.28).

20 Access to payment systems: http://www.accesstopaymentsystems.co.uk/introduction-payment-systems/what-payment-scheme

# Box A: Functions of operators

## Rules and standards

System rules, standards and procedures form the 'instruction manual' that dictates how money is moved from PSP A to PSP B within the particular payment system and payment infrastructure. Adherence to these rules, standards and procedures is mandatory for all participants.

Examples of these rules, standards and procedures include:

- the deadlines that PSPs must meet when processing a transaction
- the standard data formats used to exchange payment instructions and related messages in the payment systems (i.e. the messaging standard)
- the information that must or may be provided within payment instructions
- the basis for settlement of payment values

## Regulatory aspects governing operators and payment systems

In the UK, operators determine the functional and operational requirements that infrastructure services providers must meet and ensure that international standards for systematically important payment systems are met – for example, CPMI-IOSCO.[21]

The Bank of England is the financial stability supervisor of recognised payment systems in the UK including Bacs, FPS and LINK, for which VocaLink is the infrastructure provider.

Section 188 of the Banking Act 2009 provides that the Bank may publish Principles, to which operators of recognised payment systems must have regard. Operators will be expected to take appropriate action in respect of matters described in the Principles in a way that is appropriate to their system's particular characteristics and the risks they pose to the UK financial system or to business and other interests. The Principles for Financial Market Infrastructures (PFMIs) were adopted by the Committee on Payments and Market Infrastructures (CPMI) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) (CPMI-IOSCO) in April 2012 following consultation, and were published by the Bank of England as its Section 188 Principles in December 2012.[22]

## Access criteria and requirements

Under the current setting, operators have established a range of access criteria that PSPs must meet to be eligible for becoming a member of their respective payment system. Operators have also determined the processes that PSPs must follow to become members.

21 In the UK, Bacs, FPS and LINK have been recognised by the Treasury as systems subject to the Bank of England's oversight under the Banking Act 2009. These systems must have regard to the CPMI-IOSCO Principles.

22 The CPMI was previously known as Committee on Payment and Settlement System (CPSS). In September 2013, in the light of the Committee's standard-setting activities and the associated greater public scrutiny, the CPSS reviewed its mandate. The new mandate was approved by the Global Economy Meeting, which has also endorsed the renaming of the CPSS as CPMI, Committee on Payments and Market Infrastructures. Both changes became effective as of 1 September 2014.

## Box A: Functions of operators *(continued)*

### Price

Currently, the operational cost of each operator is covered by its members' fees. Calculation of the relevant fees for each member varies and depends on a number of factors, such as volume and profile of transactions. BPSL, FPSL and LSL operate on a not-for-profit basis. LSL also sets the LINK ATM Interchange fee.[23]

### Change requests

Currently, operators in the UK are also responsible for identifying, developing and submitting change requests to the central infrastructure services provider. These are generally enhancements to existing services, but can also relate to new services or products. Change requests can be initiated by the PSPs and submitted via the operator or by the operator on a stand-alone basis. Change requests relative to services that are centrally procured and initiated by the PSPs are first evaluated by the operator. Only those requests that are accepted by the operator are then submitted to the central infrastructure services provider.

### Procurement of central infrastructure services

**3.25** Under current contractual arrangements, procurement can be done periodically, either through a competitive procurement exercise (see Box D) or through a negotiated process between the operator and the incumbent central infrastructure services provider.

**3.26** As the procurement body, each operator in the UK determines the services and products to be procured. Infrastructure services that are not centrally procured by operators, such as gateway solutions and services are procured by the PSPs individually.

**3.27** In procuring central infrastructure services, the operator agrees with the central infrastructure services provider on key elements such as:

- length of the contract
- service level agreements (SLAs), relative financial penalties and incentives
- price for the provision of services
- a rate card to be used when the supplier carries out ad hoc work, such as change requests, and associated procedures
- contract termination provisions, including day-to-day management and exit management during transition phase (i.e. the transition to a new provider)
- the level of resources or investment committed to procured services and the underlying infrastructure

**3.28** When procuring services on behalf of their members, the operators may manage certain key risks – for example, the risk of poor performance by the provider, unforeseen fees or charges, property damage or data loss.

23 LINK, *Introduction to the Link Scheme*, (February 2016): http://www.link.co.uk/media/1201/introduction_to_link.pdf

## Central infrastructure provider

**3.29** The central infrastructure for payment systems consists of the hardware, software, secure telecommunications network and operating environments that support the clearing and settlement of payment transactions. In the UK central infrastructure services providers usually provide and run the facilities used to process payments. Electronic interbank payment systems like Bacs, FPS and LINK are based on centralised structural models with a single provider: they each have a single provider of central infrastructure services. As mentioned in paragraphs 3.25 to 3.26, these services are centrally procured by the operators on behalf of the member PSPs.

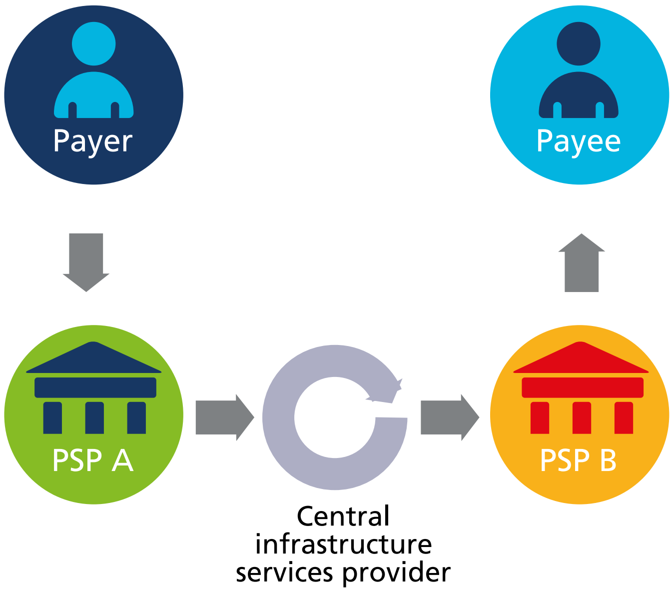
**3.30** VocaLink is the central infrastructure services provider for Bacs, FPS and LINK.

**3.31** Centralised procurement of central infrastructure services from a single provider by an operator is not the only possible structural model. Annex 5 discusses alternative payment system models that are used in other countries.

## The role of the central infrastructure services provider within a payment system

**3.32** Figure 3 shows where the central infrastructure sits in a push payment (a transaction initiated by the payer). When a payer initiates a payment, their PSP (PSP A) sends a message with payment instructions to the receiving PSP (PSP B) through the central infrastructure. The central infrastructure routes the payment instruction to PSP B based on the content of the message. Depending on the system, PSP B may then confirm it has received the message. PSP B subsequently processes the transaction and provides value to its own service-user – the payee.

***Figure 3: The main participants in a payment system***




**3.33** Members and users of payment systems that settle in central bank money benefit from the mitigation of two risks: credit risk on the settlement agent and disruption risk – for example, the risk of widespread disrupted access for the users of payment services arising from the failure of the settlement agent. The Bank of England also acts as the settlement agent for most of the major UK payment systems including Bacs, FPS and LINK.

### Providers of gateway solutions and services

**3.34** Gateway solutions and services are the infrastructure services that PSPs (or other authorised organisations) may use as their entry point to the secure communication channel for a central clearing infrastructure. They enable PSPs or other authorised parties to have technical connectivity to the payment system. Gateway solutions and services will be chosen depending on a PSP's specific requirements, which include:

- developing its entire gateway solutions in-house
- acquiring gateway solutions from a third-party infrastructure provider and then customising them in-house, or
- fully outsourcing its gateway solutions to a third-party service provider

## VocaLink's business model

**3.35** VocaLink provides payment processing infrastructure services both in the UK and abroad. Its UK provision can be distinguished between core services and non-core services.

### Core services

**3.36** Core services are the processing, clearing and back-office services – such as transmission, validation, routing, reconciliation and exception handling – VocaLink provides to PSPs using the Bacs, FPS and LINK systems. These are all governed by contractual agreements between VocaLink and the operators. VocaLink is the sole provider of these services for Bacs, FPS and LINK and runs, maintains and services:

- the central infrastructure that processes Bacs payments, under contract with BPSL
- the FPS real-time payments platform, under contract with FPSL
- the central switch operation, which is the central infrastructure used for processing and routing payments, under contract with LINK's members

**3.37** From 2010 to 2014, VocaLink's annual revenues from the provision of core services to Bacs, FPS and LINK ranged from about [✂] to about [✂] of overall revenues (see Annex 10). At the request of its shareholders VocaLink does not distribute its profits through dividends. We found that investments in non-core and other services were mainly financed by retained earnings from the core services.

## Non-core services

3.38 Non-core services are other services that VocaLink provides to Bacs, FPS or LINK, and other UK domestic banking needs. These include 'elective' services that VocaLink provides to PSPs or other system users on a bilateral basis, and also services to operators under different contracts to the core services. Examples of non-core services include:

- **Ancillary services:** These are services to operators and PSPs that involve Bacs, FPS and LINK, such as change requests which are outside the scope of the service contract.
- **Services to BPSL:** These are services under a marketing agreement with BPSL.
- **Bank Reference Data:** This is a database and related reports on banks and bank offices that participate in the UK interbank payment systems.
- **Cash ISA transfer service:** This is the provision of the technical infrastructure for the service that makes it easier for the holder of a Cash ISA account to switch to a new Cash ISA provider.
- **Current Account Switch Service (CASS):** This is the provision of the technical infrastructure for the CASS service that makes it easier for a current account holder to switch to another bank or building society.
- **Gateway services.**
- **Government services:** These include bespoke UK services such as the HMRC Real Time Information (RTI) initiative that allows HMRC to reconcile Bacs payroll payments with data sent to it by employers.
- **Contingency services:** these are payment processing services offered to a small number of government, bank and corporate customers.
- **Paym:** This relates to the provision of the platform that supports the Paym person-to-person mobile payments service, which is an overlay service that leverages the FPS system.
- **Payments Data Insight:** These are data analytics services based on the use of payments data.
- **LINK ancillary services:** These refer to a range of ATM-related solutions and managed services provided directly to PSPs, including a mobile phone top-up service and ATM estate management services.
- **Zapp:** This is a proprietary service that will leverage the FPS system to allow individuals to send payments to retailers via their own bank's mobile banking app.

3.39 Much of the non-core services work is closely connected to VocaLink's provision of the core services.

## Other services

3.40 VocaLink is currently looking to diversify its service provision to reduce its financial dependency on the core services and associated non-core revenues.

3.41 VocaLink also provides other payment-related services, including payment systems that operate in other countries.

3.42 In 2008, VocaLink signed a deal to provide processing infrastructure services for the Swedish Bankgirot payment system.

**3.43** In 2014 VocaLink, in partnership with BCS Information Systems Pte Ltd (BCSIS), launched FAST, an immediate payments service in Singapore. This enables 14 Singaporean banks and their end users to transfer funds between bank accounts in near real time.

**3.44** Towards the end of 2015, VocaLink signed a contract with The Clearing House (TCH) to develop a national real-time payment service in the United States. This will enable US consumers and businesses to send and receive real-time payments, and also provide a platform to launch innovative services including new message capabilities for financial services that go beyond basic payments.[24]

**3.45** In 2016 VocaLink signed a deal with China's UnionPay International to provide ATM transaction processing and UnionPay sponsored access. This will allow UnionPay cardholders to access ATMs in the UK and elsewhere in Europe.[25]

### Potential competitors

**3.46** So far, VocaLink (or its predecessor companies) has been the only provider of central infrastructure services for Bacs, FPS and LINK. In paragraph 4.27 and Box E, we provide a more detailed explanation of how operators have procured central infrastructure services. Other providers could represent alternatives to VocaLink for the future provision of central infrastructure services. In Box B, we provide a list of potential alternative providers, which is not intended to be definitive or exhaustive. We received feedback that they could provide similar services or components of services to those that VocaLink offers. In most cases, they already provide central infrastructure services in the UK, elsewhere in Europe or elsewhere.

## Box B: Other potential infrastructure services providers

### CGI
CGI is a global information technology and consulting firm based in Canada. It has been involved in the design, implementation and operation of national payment systems for more than 40 years, and currently operates payment infrastructures in Canada for payment systems similar to Bacs, CHAPS and LINK. It was awarded the contract to build and run the central infrastructure for the UK's planned new cheque imaging service.

[✂]

### Equens
Equens is a European payments processor. Its main areas of business are central infrastructure services, back-office services and card services. Equens holds processing sites in the Netherlands, Germany and Italy and currently provides payments infrastructure services in the Netherlands, Italy and Hungary.

[✂]

### Fidelity National Information Services (FIS)
FIS is an international provider of financial services technology. Amongst other things it provides direct debit and payment solutions.

[✂]

24 Businesswire.com, *VocaLink and The Clearing House sign a groundbreaking deal to deliver national real-time payment services in the U.S.*, (10 Dec 2015): www.businesswire.com/news/home/20151209006285/en/VocaLink-Clearing-House-sign-groundbreaking-deal-deliver

25 Banking Technology, *VocaLink signs ATM deal with Union Pay, (16 May 2016):* www.bankingtech.com/492512/vocalink-signs-atm-deal-with-unionpay

## Box B: Other potential infrastructure services providers *(continued)*

### MasterCard

MasterCard is a worldwide payment organisation. Its business activities include the switching operations for multiple banks and schemes.

[✂]

### NETS

The Northern European Transaction Services (NETS) provides payment services that are organised along seven business lines, including clearing services.

Its clients are banks and other PSPs, governments, public authorities, SMEs and corporates from Denmark, Norway, Sweden, Finland and Estonia.

[✂]

### STET

STET offers clearing services for a broad range of payment instruments, such as SEPA Credit Transfers (SCTs) and SEPA Direct Debits (SDDs) as well as other payment instruments such as card payments, ATM transactions and cheques in France and Belgium. Its clients are primarily banks.

[✂]

### Visa Europe

Visa Europe is a payments technology business and consists of both a scheme and a processing entity, which operate independently in terms of accounting, organisation and decision-making processes.

While Visa Europe's scheme entity is responsible for rules and regulations relating to the Visa brand, Visa Europe Processing provides central infrastructure services.

[✂]

### Other providers

Other providers that could be competitors of VocaLink to provide central infrastructure services include ACI, EBA Clearing and SIA.

**3.47** As we explain in paragraphs 5.26 to 5.28, there is a well-established market for the provision of some non-core services, such as gateway services. However, VocaLink is the sole provider for other non-core services – for example, the Current Account Switch Service and Cash ISA transfers.

## The origin and evolution of Bacs, LINK and FPS

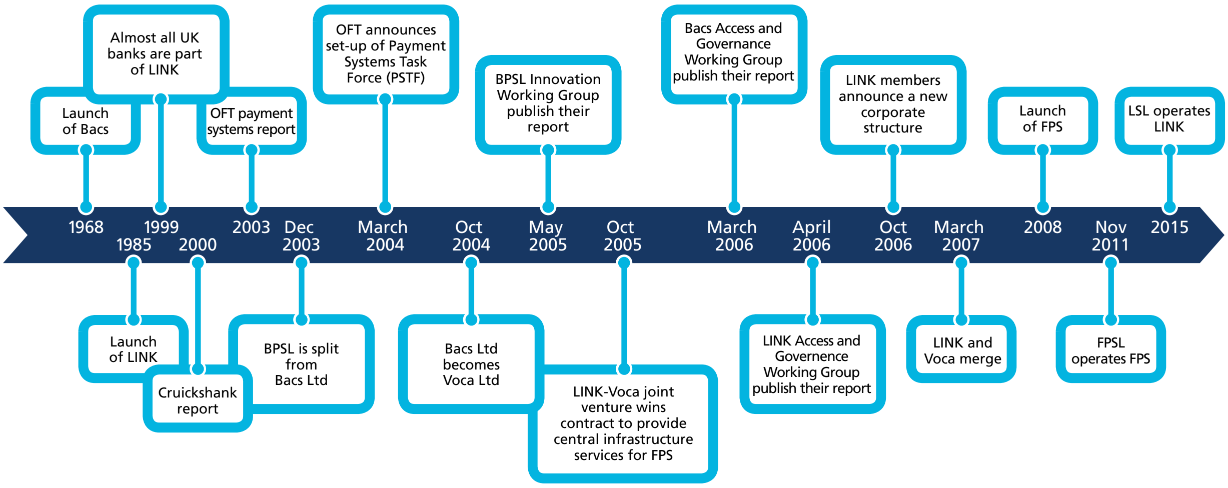
**3.48** The Bacs, LINK and FPS payment systems have evolved over time, fulfilling different needs for consumers as new methods of payments have developed. Banks and building societies developed these incrementally and often collaboratively. This is because payment systems are networks requiring the participation of enough PSPs to reach a critical mass of users. Developing payment systems requires the coordination and collaboration of different PSPs to agree on common rules and standards, and to build and run the underlying infrastructure. Over time, these functions have been delegated to operators and central infrastructure services providers.

**3.49** Understanding how Bacs, LINK and FPS began and evolved helps explain the need to review the ownership and competitiveness of infrastructure provision.

## The evolution of Bacs, LINK and FPS

**3.50** The current make-up of these three payment systems is the result of a series of changes over time. Many of these have been driven by regulatory intervention, while others happened naturally within the industry. Figure 4 shows the main events that have shaped the payment systems, and the ownership and governance arrangements for their operators and VocaLink.

***Figure 4: Timeline of main events influencing Bacs, LINK and FPS***




## Bacs

**3.51** Consumers use the Bacs Direct Debit payment method for recurring payments such as household bills, subscriptions and memberships. Organisations use Bacs Direct Credit to make regular payments such as salaries, benefits, pensions and tax credits.

**3.52** Businesses value the use of Bacs Direct Debits to collect payments from their customers as they offer a timely, efficient and effective way of collecting payments. Large billers often offer incentives to their customers to pay by Direct Debit. Currently eight in ten current account holders use Bacs Direct Debits to make regular payments.[26]

**3.53** Businesses and organisations find Bacs Direct Credits a cost-effective way to transfer money to individuals and other organisations, especially for bulk payments where the value and the time of the transactions are known in advance.[27]

### *The origin and evolution of Bacs*

**3.54** The Inter-Bank Computer Bureau was set up in 1968. Taking advantage of IT developments, it transferred funds electronically between business, banks and corporations. It operated both the system rules and the underlying infrastructure and adopted the name Bankers' Automated Clearing Services Limited (BACS Limited) in 1971.

26 Payments Council, *UK automated payments 2014*, (November 2014), p. 8
27 Payments Council, *UK automated payments 2014*, (November 2014), p. 8

**3.55** Over the years, more banks and building societies joined the Bacs system. In the early 1980s the service was also made available via telephone (BACSTEL). In 2003, Bacs moved from the telephone-based version to the internet-based version (BACSTEL-IP), offering faster and more secure services.

**3.56** In December 2003, Bacs Payment Schemes Limited (BPSL) was split from BACS Limited. BPSL would act as the operator of the system, while BACS Limited would own and run the infrastructure used by the system. BACS Limited changed its name to Voca Limited (Voca) in October 2004.

## LINK

**3.57** The primary purpose of the LINK network is to support access to cash within the UK. The network enables customers to withdraw cash from any ATM that is connected to the network, not just the ATMs of the bank or building society they hold an account with.

**3.58** More than 70,000 cash machines or ATMs are connected to the LINK network, which accounts for almost every ATM in the UK, both free-to-use and pay-to-use.[28] Alongside ATM cash withdrawals, the payment system also provides other services such as balance enquiries and PIN (personal identification number) changes.

### *The origin and evolution of LINK*

**3.59** In the 1970s and early 1980s more and more customers joined the banking system as the payment of wages directly into current accounts became more common. Cash machines were being introduced to allow bank customers to withdraw cash more conveniently, especially outside normal banking hours.

**3.60** Cash machines were originally perceived by banks as an important way to attract more customers and gain a competitive advantage over other banks. In the 1970s, banks and building societies launched cash machines that could be used only by their own customers.

**3.61** In the 1980s building societies and banks started to agree that a shared network of ATMs was the way to offer this increasingly popular technology to the UK population and ease congestion at retail bank branches. The LINK system was set up at the end of 1985 to enable small banks and building societies – 33 members overall – to share ATMs. These members formed a company called LINK Interchange Network Ltd (LINK) to operate the system and its underlying infrastructure.[29] The network of ATMs grew in size over time as other ATM networks, building societies and banks joined, including Halifax in 1989, RBS and NatWest in 1997 and Barclays in 1998.[30]

**3.62** In October 2006 LINK owners and members announced a new corporate structure. This would functionally separate the central infrastructure services provider called LINK Interchange Network Ltd (LINK) from the operator of the payment system called the Link Scheme.

### *The merger between Voca and LINK*

**3.63** In May 2007 LINK and Voca merged into a new entity called VocaLink Limited, integrating the companies that supplied the central infrastructure services to both Bacs and LINK. VocaLink continued to be vertically integrated and the Link Scheme was an operating division of VocaLink.[31]

28 LINK, *Statistics*: http://www.link.co.uk/about-link/statistics/

29 Cruickshank Report, *Competition in UK banking: A report to the Chancellor of the Exchequer* (March 2000), paragraph 3.4, p. 53.

30 Batiz-Laso, B, *Emergence and evolution of ATM networks in the UK, 1967–2000* (2009).

31 PSR CP14/1.3, *Ownership, governance and control of payment systems* (13 November 2014) p. 9: www.psr.org.uk/sites/default/files/media/PDF/psr-cp14-1-3-sp3-ownership-governance--control-of-payment-systems.pdf

**3.64** Following the merger, some of the LINK Access and Governance Working Group's recommendations on governance were implemented. Independent non-executives joined the new VocaLink.[32] The recommendation to open up shareholding to other relevant market participants was not implemented.

### *The separation between Link Scheme and VocaLink*

**3.65** In our Interim Report we proposed the separation of common ownership of the functions of LINK from VocaLink as there was evidence suggesting that such arrangements were making it more difficult to change provider of central infrastructure services for LINK. In our interim report we acknowledged that such separation was already planned. However, it was not fully implemented. We then recommended that such separation was completed.

**3.66** In 2015 the Link Scheme started a restructuring process to separate its functions and operations from VocaLink. The Link Scheme set up the Link Scheme Limited (LSL) in December 2014 as an incorporated company which the PSP members have appointed as the operator in 2015 (see Annex 3). Following a lengthy period of negotiation between LSL, Scheme Members and VocaLink, on 1st April 2016 new arrangements were put in place to define a more typical client-supplier processing relationship between LSL, Scheme Members and VocaLink, and to outline governance arrangements between LSL and Scheme Members.

**3.67** In particular, the previous Network Members Agreement (NMA) – which governed the provision of core services and the governance arrangements directly between VocaLink and Scheme Members – was split into two separate contracts: a Switching and Settlement Agreement (SSA) governing the commercial provision of core switching services by VocaLink, and a Members Agreement (MA) defining the governance arrangements between the operator (LSL) and scheme members. The restructuring also determined allocation of assets and intellectual property rights between LSL, VocaLink and the scheme members. As a result to these negotiations, LSL and VocaLink became legally separate entities, with VocaLink remaining the sole central infrastructure provider to LSL.

## FPS

**3.68** FPS is an automated clearing and settlement system that processes individual push payments from personal customers, corporate customers and financial institutions. It operates 24 hours a day, seven days per week.

**3.69** FPS is mainly used for three types of transactions: one-off single immediate payments (SIPs), one-off forward-dated payments (FDPs) and standing order payments (SOPs). It also supports direct corporate access (DCA) payments.

- **SIPs:** These are near real time and are typically initiated by consumers using their bank's internet, mobile or telephone banking services.
- **FDPs:** One-off payments sent and received on a pre-arranged date, set up by the customer in advance, typically to pay bills, such as rent.
- **SOPs:** These are regular payments that pay a fixed amount to the same recipient on regular dates.
- **DCA:** This is a payment initiation service for business customers, enabling bulk files of payment messages to be sent directly to FPS.

32 LINK press release, *Voca and LINK get green light from OFT to merge* (3 May 2007): www.link.co.uk/Media/NewsReleases/Pages/VocaandLINKgetgreenlightfromOFTtomerge.aspx

### *The origin and evolution of FPS*

**3.70** When launched in 2008, FPS was the first major new payments service to be introduced in the UK in over 20 years. The development of the Faster Payments Service was driven in 2005 by pressure from the OFT and HM Treasury through the Payment Systems Task Force. The contract to build and maintain the infrastructure was awarded by the Association for Payment Clearing Services (APACS) – the organisation that procured the central infrastructure services for the new FPS system at the time – to Immediate Payments Limited, which was a joint venture between Voca and LINK.[33,34] As mentioned in paragraph 3.94, in 2007 Voca and LINK merged and became VocaLink – provider of central infrastructure services for Bacs, FPS and LINK.

**3.71** Since its launch in May 2008, the service has processed over six billion payments.[35]

**3.72** Ten banks and building societies are direct participants in this payment system and hundreds of other financial institutions are able to offer the service to their customers through indirect access arrangements with a sponsor bank. These institutions are also able to join the service as a direct member should they wish and if they meet the FPS eligibility requirements for admission.

**3.73** Since its launch, a number of different organisations have operated the FPS payment system. The last handover was in November 2011, when Faster Payments Scheme Limited (FPSL) was established to operate FPS.

## Regulatory interventions

**3.74** As banks and building societies developed payment systems, they set both the rules governing the payment systems and the requirements for the supporting infrastructure. For each payment system, the same payment scheme company managed the rules and also built and operated the supporting infrastructure. For example, until 2003 BACS Limited was acting as both operator and central infrastructure provider for Bacs.

**3.75** Over the past 15 or so years, payment systems have been the subject of various reviews and there have been various regulatory interventions relating to Bacs, LINK and FPS. In what follows we provide an overview of these interventions to illustrate how these have contributed to the current make-up of these three payment systems.

### *The Cruickshank Report (2000)*

**3.76** At the end of the last century the Chancellor of the Exchequer commissioned a report on competition in UK banking services – the Cruickshank Report. Its goal was to examine the levels of innovation, competition and efficiency in the main UK banking markets, including the money transmission market (UK payment systems).

**3.77** The Cruickshank Report found that the money transmission market had profound competition problems and inefficiencies, plus a lack of innovation.[36] The report noted how some of these problems could be traced back to the governance structure of the UK payment systems.[37] Payment systems like Bacs and LINK were mutually owned and effectively were controlled by the larger high street banks.

**3.78** Cruickshank concluded that this structure enabled the banks that controlled the payment systems to create barriers to entry for competitors by restricting access to these systems. In all payment systems, full access to the system was granted only to full members. Non-members could access the

33 The Association of Payment Clearing Services was the industry organisation responsible for interbank payments within the UK at the time.
34 Faster Payments, *CPSS-IOSCO Self-assessment public disclosure for Faster Payments Scheme Limited 2014*, (16 July 2014), pp. 3–4.
35 PSR analysis of Payments UK data *Historical monthly statistics*: http://www.paymentsuk.org.uk/industry-information/free-industry-statistics
36 Cruickshank Report, executive summary.
37 Cruickshank Report, executive summary.

system only through obtaining sponsorship from a full member. This was putting non-members at a commercial disadvantage, as they depended on a competitor for access.[38]

**3.79** The Cruickshank Report also noted that the mutual ownership and governance of the UK payment systems was restricting innovation. Existing member banks had little incentive to innovate, especially if this required a costly change in the existing infrastructure and was purely to benefit customers or new entrants.[39]

**3.80** The report also stated that, with mutual ownership and governance, innovation typically moved at the pace of the slowest members. Decisions within payment systems required consensus. Members were then able to deliberately slow progress and delay innovation if interests were not aligned.[40]

**3.81** The report mentioned that an effective first step in the reform of Bacs and LINK would be to transfer the central infrastructure to independent for-profit companies.[41] These companies would operate and develop the infrastructure for the payment systems, independent of the operators. The operators would continue to be responsible for setting the rules of the payment systems. The report claimed that these changes would promote more flexible and innovative use of the infrastructure.[42]

### *The OFT Payment Systems Report (2003)*

**3.82** In 2003 the OFT reviewed developments in the payment systems industry since the Cruickshank Report. The review noted that Bacs had initiated governance reforms and innovative developments.[43,44] These included, as suggested in the Cruickshank Report, a proposal to separate the operator (Bacs Payment Schemes Limited (BPSL)) and the central infrastructure provider (first called BACS Ltd, then Voca). Separation took place in December 2003.[45] But the review also noted the proposed separation would result in a similar ownership arrangement for the central infrastructure services provider and the operator, as the same banks were involved in both.

**3.83** In its 2003 market study of UK payment systems, the OFT stated:

'The proposed separation of scheme [operator] and infrastructure with BACS might facilitate inter-system competition, and in particular, plastic card networks might be able to use their infrastructure to offer competing clearing systems. However, such separation seems unlikely to have much impact on inter-system competition in the short term when the ownership profile of scheme and infrastructure will remain similar.'[46]

### *The Payment Systems Task Force*

**3.84** In December 2003 the government gave the OFT a remit to address the issues in payment systems over the following four years.

**3.85** In March 2004 the OFT created the Payment Systems Task Force (PSTF). Its task was to identify, consider and try to resolve competition, efficiency and incentive issues relating to payment systems, especially those identified by the Cruickshank Report.[47] The PSTF established working groups – chaired by the OFT and including PSPs, consumer associations and other industry organisations –

38 Cruickshank Report, page 70, paragraph 3.67.

39 Cruickshank Report, page 83, paragraph 3.124.

40 Cruickshank Report, page 83, paragraphs 3.125 to 3.127.

41 Cruickshank Report, pages 99 and 100, paragraphs 3.210 and 3.214.

42 Cruickshank Report, pages 99 and 100, paragraphs 3.210 and 3.215.

43 Some of the self-regulated changes related to the governance of the payment system operators. See OFT658, paragraphs 1.17 to 1.20.

44 OFT 658, *UK payment systems: An OFT market study of clearing systems and review of plastic card networks*, (May 2003), page 15, paragraph 2.5: webarchive.nationalarchives.gov.uk/20140402142426/http://oft.gov.uk/shared_oft/reports/financial_products/oft658.pdf

45 OFT 658, *UK payment systems: An OFT market study of clearing systems and review of plastic card networks*, (May 2003), page. 46, paragraph 8.17.

46 658, *UK payment systems: An OFT market study of clearing systems and review of plastic card networks*, (May 2003), page 9, paragraph 1.44.

47 OFT901, *Final report of the Payment Systems Task Force* (February 2007), page 5, paragraphs 2.7 to 2.8: webarchive.nationalarchives.gov.uk/20140402142426/http:/www.oft.gov.uk/shared_oft/reports/financial_products/oft901.pdf

to focus on specific issues. Some of these included: the BPSL Innovation Working Group; the Bacs Access and Governance Working Group; and the LINK Access and Governance Working Group.[48]

**3.86** The BPSL Innovation Working Group considered the potential for innovation in the services BPSL offered, and in particular the introduction of faster payment services (specifically, a same- or next-day service). This working group identified the market appetite for these services in their report, published in May 2005.[49] Following this, the OFT and the Treasury pressured the industry to implement a new system offering the services that would become the FPS system.[50] This was introduced in May 2008, enabling PSPs to offer near real-time retail payments.

**3.87** The Bacs Access and Governance Working Group's role was to examine the negative impact on competition and innovation caused by:

- the mutual governance model of the Bacs operator
- the restrictions on access to the Bacs payment system[51]

**3.88** These were issues raised in the Cruickshank Report and the 2003 OFT Report.

**3.89** The working group published its report in March 2006 and recommended:

- the Bacs operator should broaden its objectives – the directors appointed to the board should be required to promote the interests of the operator, not the member banks that appointed them[52]
- the operator's objectives should include the promotion of efficiency and innovation in payments, and respond to user and market needs[53]

**3.90** The LINK Access and Governance Working Group focused on the governance of LINK Interchange Network Limited – the company providing central infrastructure services – and the Link Scheme that operated the system. The working group published its report in April 2006.

**3.91** While the LINK Access and Governance Working Group recommended increasing the degree of separation between LINK's two constituent parts, it did not recommend full separation.[54] This was because LINK had been an innovative payment system, and the working group felt greater competition for its infrastructure services provision would not have made it significantly more innovative. In fact, they were concerned that a split between the two companies would actually serve to reduce innovation, because the Link scheme executive provided expertise to the infrastructure company and assisted with innovations to the LINK system.[55]

**3.92** The working group highlighted competition and innovation issues related to the governance of the company providing central infrastructure. They found that ownership and control of this company had been restricted, constraining new opportunities and innovation.[56] The company was owned by 22 banks and shares were restricted to those owners – therefore non-owners could not buy shares in the LINK company. This implied that the company's non-executive directors all came from financial

48 OFT789a, *First annual progress report of the Payment Systems Task Force*, (May 2005), page. 3, paragraphs 2.7–2.8, and Annex E: webarchive.nationalarchives.gov.uk/20140402142426/http:/www.oft.gov.uk/shared_oft/reports/financial_products/oft789a.pdf

49 OFT789a, *First annual progress report of the Payment Systems Task Force*, (May 2005), Annex C: webarchive.nationalarchives.gov.uk/20140402142426/http:/www.oft.gov.uk/shared_oft/reports/financial_products/oft789a.pdf

50 HM Treasury, *Setting the strategy for UK payments*, (July 2012), page 16, paragraph 4.9: www.gov.uk/government/uploads/system/uploads/attachment_data/file/81567/setting_strategy_uk_payments190712.pdf

51 OFT836, *Bacs Access and Governance Working Group report*, (March 2006), page 1, paragraph 1.3: webarchive.nationalarchives.gov.uk/20140402142426/http:/oft.gov.uk/shared_oft/reports/financial_products/oft836.pdf

52 OFT836, *Bacs Access and Governance Working Group report*, (March 2006), page 23, paragraph 4.7.

53 OFT836, *Bacs Access and Governance Working Group report*, (March 2006), executive summary.

54 OFT840, *LINK Access and Governance Working Group report*, (April 2006), paragraph 5.5, p. 33: webarchive.nationalarchives.gov.uk/20140402142426/http:/oft.gov.uk/shared_oft/reports/financial_products/oft840.pdf

55 OFT840, *LINK Access and Governance Working Group report*, (April 2006), page 33, paragraph 5.5.

56 OFT840, *LINK Access and Governance Working Group report*, (April 2006), page 28, paragraph 4.14, page 42, and paragraph 6.24.

institutions. Considering that LINK was a technology company, the working group concluded that directors from other backgrounds would enrich the existing expertise of the directors.

**3.93** The working group recommended that:

- the ownership of the company should be opened up to other market participants
- the size of the board should be reduced to make it more effective
- a number of independent directors should be introduced on the board (as well as the existing independent chair)[57]
- the degree of separation should be increased, though falling short of a full legal split

**3.94** LINK's owners and members announced their new corporate structure in October 2006. LINK would provide the central infrastructure services, while the Link Scheme and its governing body (the NMC) would operate the system.[58]

**3.95** Not all of the LINK working group recommendations were implemented – for example, widening the membership to non-market participants.

**3.96** Neither of these changes to governance proved fully effective. The government made it clear that the current system was not adequately meeting objectives to promote and develop new and existing payment systems, and to facilitate competition.[59] It noted the slow pace of innovation, which in some cases, such as the multiple delays in setting up FPS, may have led to significant losses to the UK economy.

### *Current situation*

**3.97** In 2012/13, the Treasury proposed creating a new and independent regulator of payment systems – the PSR. The PSR would ensure that the governance and operation of the payment systems is not a barrier to competition in the provision of payment services, and in the wider UK financial services market.[60]

**3.98** Currently, VocaLink provides central infrastructure services to three UK payment systems, Bacs, FPS and LINK.

**3.99** Bacs now has a separate operator (BPSL) and central infrastructure services provider (VocaLink), and FPS is characterised by similar arrangements. Following the restructuring process, LINK has a separate operator (LSL) and central infrastructure services provider (VocaLink) (see paragraphs 3.66 and 3.67). In all cases, there is still a significant overlap in the governance of the operator and the central infrastructure services provider. This is due to a significant overlap in a small number of PSPs controlling the operators and the central infrastructure services provider (see paragraphs 6.17 to 6.18). These PSPs are also the main direct participants of the related payment systems (see paragraph 6.13 and Annex 3).

**3.100** In November 2014 we announced this market review, focusing on the provision of central infrastructure services to Bacs, FPS and LINK payment systems.[61] In 2015, having consulted on terms

57 OFT840, *LINK Access and Governance Working Group report*, (April 2006), page 45, paragraph 6.32.

58 OFT901, *Final report of the Payment Systems Task Force*, (February 2007), page 3, paragraph 1.10.

59 HM Treasury, *Setting the strategy for UK payments,* July 2012: https://www.gov.uk/government/consultations/setting-the-strategy-for-uk-payments

60 HM Treasury, *Consultation Opening Up Payments*, p 10 and 16, paragraph 3.20 and 4.7: https://www.gov.uk/government/consultations/opening-up-uk-payments

61 PSR CP14/1, *A new regulatory framework for payment systems in the UK* (November 2014), page 24, paragraphs 61 to 63: www.psr.org.uk/psr-publications/consultations/consultation-paper-141

of reference we decided to proceed with the review.[62] In February 2016 we published the interim report and we invited stakeholders to submit consultation responses.[63]

**3.101** Our market review is aligned with the work of the Payments Strategy Forum (the Forum) aimed at promoting competition in the provision of infrastructure services in the interbank systems space. We created the Forum in 2015 to develop a strategy for collaborative innovation in payment systems in the United Kingdom. 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 and to make payment systems work better for those that use them.[64]

**3.102** The Forum has focused on collaborative initiatives that will allow PSPs and fintechs to innovate in order to respond better to the needs of users. The Forum's draft strategy has proposed to[65]:

- introduce a number of solutions to enable greater control, assurance and enhanced data quality into payment systems
- introduce a common messaging standard (ISO 20022)
- consolidate Bacs, Faster Payments and Cheque and Credit Clearing so that management of rulebooks and procurement of infrastructure would take place under one entity
- institute a governance entity to oversee and set Application Programming Interfaces (API) implementation standards for use in the PSP to PSP and PSP to market infrastructure
- use our payment systems to address financial crime, data and security concerns

**3.103** As part of work on simplifying access to the markets, the Forum has considered issues closely related to the Infrastructure Market Review, such as common messaging standards, the consolidation of the schemes, and API implementation standards. Together these proposals aim to improve interoperability in the end to end payments infrastructure and facilitate competition for the provision of infrastructure services. The Forum's draft strategy also proposes a long-term vision of a new simplified layered architecture, based on common messaging standards, overlay services and Open APIs. This could, in the long term, change the nature of how infrastructure services are procured. The Forum has recommended that a detailed study in undertaken (to be concluded by 2018) to further define the new architecture, assess its costs and benefits, and develop an implementation plan.

**3.104** The key question of our current market review is whether competition is effective in the provision of infrastructure services related to interbank systems and, if not, what the reasons for this are. This includes investigating whether the current ownership arrangements of infrastructure providers affect competition in the provision of these services.

**3.105** To summarise, banks and building societies have developed the three payment systems – Bacs, FPS and LINK – in a collaborative manner. This has led to secure and resilient payment systems – but there have been concerns about innovation and competition, which have been attributed to the ownership and governance arrangements of these systems. Some changes have been made in recent years to address these concerns. In the course of this review, we have examined how far these changes have delivered their anticipated benefits.

62 PSR MR15/2.1, *Market review into the ownership and competitiveness of infrastructure provision, Terms of reference*, (June 2015), paragraphs 1.2 to 1.3, p. 4: www.psr.org.uk/sites/default/files/media/PDF/Infrastructure%20final%20terms%20of%20reference.pdf

63 PSR MR15/2.2, *Interim report: market review into the ownership and competitiveness of infrastructure provision* (February 2016): www.psr.org.uk/psr-publications/market-reviews/MR1522-interim-report-infrastructure-provision

64 https://www.paymentsforum.uk/about

65 Payments Strategy Forum *Being responsive to user needs: a draft strategy for consultation* (July 2016): https://www.paymentsforum.uk/consultation

# 4. Competition for the provision of central infrastructure services

This chapter explores whether there is effective competition for the provision of central infrastructure services for Bacs, FPS and LINK. We have considered:

- the current state of competition and outcomes
- barriers to switching
- barriers to entry

We find that there is currently no effective competition in the market for the provision of central infrastructure services for Bacs, FPS and LINK. The operators – as the current procurers of core services on behalf of direct payment service providers (PSPs) – have not periodically held competitive procurement processes or even sufficiently tested the market to compare VocaLink's offerings to alternative proposals. These alternatives could potentially be more efficient and innovative. We find that both operators and direct PSPs do not have a strong incentive to drive effective competition. As a result, the incumbent provider has faced limited competitive pressure.

We do not observe processes that would ensure that the outcomes observed meet the current and ongoing needs of all service-users, and that the full ongoing benefits of competition are achieved.

We identify the lack of competitive procurement exercises as a barrier to entry that prevents potential providers from competing, despite there being a number of providers that are interested. In addition, VocaLink's ownership arrangements and the lack of interoperability (including the bespoke messaging standards) act as barriers to entry.

Link Scheme Limited and VocaLink are now legally separated. We find that the current contract for LINK core infrastructure services does not present a high barrier to switching provider.

## Introduction

4.1 Competition for infrastructure services can provide a number of benefits. It can lead to lower prices, higher quality of service and promote efficiency and innovation. If competition in the market is working effectively, we would expect to see a range of infrastructure providers competing for contracts with operators and/or direct PSPs. Operators and/or direct PSPs would assess the service proposals and pricing of these infrastructure providers to choose one or more providers that best suit their needs. In such a market, effective competition ensures that operators and service-users get value for money for existing products and services. It also provides incentives for infrastructure providers to innovate to attract and retain their customers, which gives rise to dynamic benefits in terms of improved products and services. This ongoing process of innovation helps ensure that the products and services offered meet the needs of service-users as these evolve.

**4.2** Innovation at the infrastructure level could deliver many benefits to PSPs. Examples include additional functionality (such as better liquidity management tools), faster and more flexible service, and additional overlay services, all of which could spur more competition and innovation downstream. Procurement could be done unilaterally or collectively, depending on the firm's cost benefit analysis and firms' and the industry's preference towards collaboration.

**4.3** As Figure 5 shows, when both the customer side (operators and PSPs) and firm side (infrastructure providers) of the market are functioning well, this can lead to a 'virtuous circle' of competition.

***Figure 5: Virtuous circle of competition***


## Natural monopoly and competition

**4.4** Before we evaluate the state of competition, we set out why we do not see the provision of central infrastructure services in Bacs, FPS and LINK as a natural monopoly. This is crucial as it influences the scope and form of competition and how we evaluate the state of competition in UK payment systems. A natural monopoly occurs where it is most efficient for production to be permanently concentrated in a single firm rather than contested competitively. It is typically characterised by high barriers to entry – for example, due to extremely high fixed costs and significant economies of scale. A natural monopoly can be contested in terms of competition for the market.

**4.5** The provision of central infrastructure services by VocaLink has some features similar to a natural monopoly. For example, it requires high upfront investment that needs to be recovered over a few years. The fixed cost of VocaLink's core services is more than [✂] that of its total variable costs. There are also efficiency gains due to economies of scope across different systems – for example, a large proportion, [✂]%, of running costs are shared among Bacs, FPS and LINK. Our analysis of past volume and cost data for the period 2010 to 2014 also found some economies of scale within FPS.

**4.6** However, the provision of central infrastructure services has other distinct features that lead us to conclude that it is not a natural monopoly:

- Alternative infrastructure providers already exist (at least in part) elsewhere in Europe (see Box B). Therefore, although the central infrastructure requires high fixed upfront investment, this cost would not act as a barrier to potential new entrants because European providers of similar services in other markets already have the infrastructure in place, which can be used to provide services in the UK. Hence, unlike traditional utilities like water and energy – where there are no existing competing infrastructures and it is expensive to build new networks to enter the market – entrants to this market do not need to incur such significant upfront costs.

- The efficiency gain that VocaLink receives from economies of scope would not act as a barrier to entry. We note that there are potential entrants to the UK market that are currently providing infrastructure services elsewhere that could leverage on the economies of scale or scope from that provision. Alternatively, services could be provided by a consortium of parties.
- The asset life (depreciation period) used by traditional utilities is around 20 to 45 years.[66] A long asset life means that investment costs are recovered over a long period and it is efficient to have one permanent provider to recoup costs and encourage investment. However, VocaLink's assets have a much shorter life – [✂]. Any new entrant should therefore be able to recoup its investment in a relatively shorter period and it is not necessary to grant permanent or very long-term contract rights to a provider. This means it is not necessary to have one permanent provider of central infrastructure services.

**4.7** Furthermore, there are other structural models of central infrastructure provision, such as the Single Euro Payments Area (SEPA), where there are multiple central infrastructure providers that contract directly with individual PSPs (see Annex 5). This suggests that the most efficient structure may not be for one firm to permanently operate the central infrastructure. We therefore conclude that the provision of central infrastructure services for Bacs, FPS and LINK is not a natural monopoly and that competition is possible.

**4.8** VocaLink told us it does not believe the provision of central infrastructure services in the UK is a natural monopoly. It said that economies of scale in the provision of these services are not a barrier to entry to the UK market for potential providers. It added that its experience in the SEPA model and other sectors demonstrates that network effects are becoming less important given developments in technology and do not act as a barrier to entry. One direct PSP also noted that technological developments – to more flexible and open infrastructure than the previously used 'heavy duty' infrastructure – could support more than one provider in the market.

## Competition 'for the market' and competition 'in the market'

**4.9** There are broadly two possible types of competition in a market – competition **in** the market and competition **for** the market.

**4.10** Competition **in** the market occurs when there are multiple providers in a market that simultaneously compete for customers' business, with the customer choosing the product or service they prefer. This means that providers have an incentive to become more efficient and innovative, and to respond to customers' needs. If they do not, they risk losing customers. This type of competition is found in most markets.

**4.11** Competition **for** the market occurs when there is only one provider to the market at a given time. This is usually because providing the product or service involves high fixed costs, investments or set-up costs. For these costs to be recovered, it typically requires sufficiently large customer demand over a certain period. In this situation, the duplication of these costs when there is more than one provider leads to higher prices for the customers. Therefore, having a single provider is more efficient.

**4.12** Rail services are an example of competition **for** the market. These services are provided under regional franchises for a specified period. The government awards the franchises to the train companies through a competitive procurement process. In most cases, the franchisee is the only provider of train services in the local area or for a defined set of routes.[67]

66 Sinclair Knight Merz and GL Noble Denton, *The economic lives of energy network assets: A report for Ofgem* (2010), Cambridge Economic Policy Associates Ltd, Table 1.1.

67 Competition and Markets Authority, *Competition in passenger rail services in Great Britain* (July 2015), page 6, paragraph 1.10: https://assets.digital.cabinet-office.gov.uk/media/55a8d1d6e5274a6fea000011/Passenger_rail_services_in_Great_Britain.pdf

### Competition for the provision of central infrastructure services

4.13 In the current industry structure for Bacs, FPS and LINK, there is theoretically competition **for** the market for the provision of central infrastructure services (see paragraphs 3.25 to 3.28). The operators of Bacs, FPS and LINK each procures core services from only one provider at a time and for a certain period (core services are defined in paragraph 3.36). This is done through a contract for core services (see Box C). Under the current structure, operators procure these services collectively on behalf of the direct PSPs.

## Box C: Recent awarding of contracts for the provision of core services

### Bacs

Bacs Payment Schemes Limited (BPSL) currently procures core services from VocaLink. The current contract started in 2014. It can be terminated on or after 1 December 2020, with 24 months' prior notice (i.e. notice can be given from 1 December 2018).

### FPS

Faster Payments Scheme Limited (FPSL) currently procures core services from VocaLink. The current contract was signed in 2014. It expires on 30 June 2020 and the contract has two break clauses which require 24 months' prior notice to be given: 30 June 2018 (this notice period has passed) and 30 June 2019.

### LINK

Link Scheme Limited (LSL) currently procures core services from VocaLink. The current contract started in 2016. The contract is an open-ended agreement which can be terminated on or after 1 April 2021 with 24 months' prior notice.

4.14 However, we recognise that it is possible to have competition **in** the market for the provision of central infrastructure services. This can occur when PSPs directly purchase central infrastructure services from multiple infrastructure providers (a different market structure to what currently exists). An example of this in practice is the SEPA Euro clearing system. In SEPA, many PSPs directly choose from multiple central infrastructure providers, although collective procurement does occur in SEPA at the national level in some areas. (This type of market structure and other alternative ways to structure payment systems and the provision of central infrastructure services are outlined in Annex 5.)

4.15 For direct purchasing to be feasible, there needs to be sufficient interoperability between market participants so PSPs can choose amongst the providers. However, as outlined in paragraphs 4.282 to 4.290, we find there is limited interoperability in the UK payment systems. Because of this, we are not convinced that direct contracting is a realistic possibility in this market at this time. Therefore, we focus our assessment of competition in the context of the current UK arrangements with a collective purchasing model and competition **for** the market.

4.16 Direct purchasing may be possible in the medium to long term. This is because there are potential changes that can be made to facilitate more interoperability. Some of the proposals set out in the Payments Strategy Forum's (the Forum) draft strategy include the possibility of some of PSPs contracting directly for central infrastructure, while others continue to procure collectively in the medium to long term.

4.17 It is also important to consider whether competition between payment systems occurs in this market (that is, competition **in** the market for payment systems). When this exists, the operator of a payment system competes against other payment systems (and the payment products and services they offer) for PSPs' business. PSPs would shift their transaction volumes to the payment system (and its products and services) that the PSP believes would enable it to best compete downstream in the retail banking market.

**4.18** The available evidence suggests that the competitive constraint from rival payments systems that Bacs, FPS and LINK face is limited. All the large PSPs participate in all three schemes, suggesting that there are limits to the degree of substitutability between what these three payment systems offer and what payment products and services other payment systems offer. Of the three payment systems, LINK faces the most obvious competitive threat, with both MasterCard and Visa as potential alternatives. However, to date this competitive threat appears to have been limited: only one direct PSP, with a small market share, has decided to leave LINK for one of the card systems.

## Effective competition for the provision of central infrastructure services

**4.19** In this situation, the incumbent and other potential providers can face competitive pressure when there is competition **for** the market. If the incumbent thinks that the procurer might change provider at the end of the contract, it has the incentive to innovate and deliver quality services, and compete to retain the contract. Similarly, other potential providers have the incentive to invest in innovation to put forward more competitive proposals in the next procurement round.

**4.20** This competitive pressure can be achieved by the procurer periodically gathering information about alternative options available to it and adequately comparing those options. This requires a certain amount of effort on behalf of the procurers and providers to establish, in detail, what providers and services are available and to make an adequate comparison of potential offerings. This is because the market for the provision of central infrastructure services is not a transparent one. Prices and service quality are not publicly available (as noted in the Lipis report we commissioned that compares payment systems across 12 countries[68]). Also, differences in the infrastructure service requirements for different payment systems means that it may not be possible to compare outcomes across payment systems on a like-for-like basis.

**4.21** Therefore, for there to be effective competition in this market the procurer periodically needs to, at a minimum, sufficiently test the market (market testing, see Box D). The procurer may then invite potential providers to submit formal proposals for the work (competitive procurement process).

68 Lipis Advisors, *Payment system ownership and access models: Comparative analysis of 13 countries* (December 2015), page 32: https://www.psr.org.uk/psr-publications/market-reviews/MR1522-lipis-report

# Box D: Market testing and competitive procurement

## Market testing

In this context, general market testing is when a prospective buyer seeks to gauge the level of interest of potential providers and assess the capacity of the market to deliver certain products or services. Market testing is not a formal procurement process and is not governed by specific rules, but it does imply that the desired provision of products or services is discussed with potential providers. These discussions might also relate to:

- which additional products or services are available
- anticipated future changes as a result of legislation, user demands and/or best practice
- possible innovations relative to the products or services that potential suppliers could introduce
- terms of the contract, payment mechanisms and tentative price offerings
- performance indicators

Before undertaking a market-testing exercise, we would expect that procurers consult with their users to understand what additional products and services they would value. Providers engaged in the market-testing phase will normally submit bids if a competitive procurement process follows.

**Competitive procurement**

Competitive procurement is the process of buying goods or services through a controlled process in which potential providers are invited to express their interest and willingness to supply the relevant goods or services. A competitive process typically involves steps such as: request for proposals, evaluation, selection and contract issuance. There are different forms of competitive procurement – open tenders, two-stage tenders, restricted tenders and competitive dialogue procedures. The most suitable form of competitive procurement depends on specific circumstances – for example, the number of potential competitors, value of the contract to be awarded and existence of a technical specification detailing the characteristics of the provision. A competitive procurement implies that different providers are benchmarked on the basis of their proposals. The winning proposal is the one believed to best meet the buyer's decision-making criteria (for example, offering the best value for money or with the most innovative aspects).

## Our assessment of effective competition

4.22 In the remainder of this chapter, we assess whether there is effective competition for the provision of central infrastructure services for Bacs, FPS and LINK, and if there are any barriers to effective competition.

4.23 To determine this, we look at:

- the current state of competition and outcomes
- barriers to switching infrastructure provider
- barriers to entry

4.24 We then give our overall conclusion on competition for the provision of central infrastructure services.

## Current state of competition and outcomes

4.25 To assess whether there is effective competition for the provision of central infrastructure services, we look at:

- the extent of market testing and competitive procurement when procuring core services
- operators' and PSPs' incentives to run market testing exercises and/or competitive procurements
- the value for money that operators and direct PSPs get from VocaLink
- the quality of services provided by VocaLink
- innovation
- potential competitors

### Market testing and competitive procurement

4.26 Customers can help drive effective competition in a market if they are both engaged and active. They can do this by monitoring the competitiveness of the products they already hold and gathering information about alternative firms and the products they could provide and comparing these. We consider the extent to which the operators have compared different offerings of core services.

### Stakeholders' views and evidence

#### *How core services have been procured*

4.27 We asked operators if they had attempted to run a competitive procurement process to compare VocaLink's offerings for the core services for Bacs, FPS and LINK with other potential providers' proposals. BPSL and FPSL did not mention any previous competitive procurement, or even market testing exercises, for procuring core services, except for the initial build-and-run tender for FPS in 2005 (see Box E). Rather, when the contracts had come up for renewal, the operators had renegotiated the contract with the incumbent provider, VocaLink. LSL ran a closed request for information (RFI) process in early 2015, which had characteristics of market testing (see paragraph 4.51 to 4.56). Prior to this, LSL had an evergreen contract with VocaLink, which had been renegotiated once in 2007.

## Box E: How core services have been procured to date

We outline the previous procurement events in Bacs, FPS and LINK over the past 12 years since the separation of governance and infrastructure provision within these payment systems.

### Bacs

Since the separation of operator and infrastructure provider in 2003, BPSL has renegotiated its contract with VocaLink on two occasions – in 2008 and 2014. In 2008, BPSL decided to extend the contract with VocaLink and renegotiated some of the terms. In 2014, when the contract came up for renewal, BPSL renegotiated with VocaLink using a single-supplier Request for Approach (this was not a competitive procurement, nor a market-testing exercise). BPSL and VocaLink signed a new contract in November 2014 – which is the current contract for core services. BPSL has never run a competitive procurement exercise for these services.

### FPS

When FPS was created, a competitive tender was held in 2005 to select the central infrastructure provider that would build and run the FPS infrastructure. VocaLink was awarded the build-and-run contract and the FPS payment system was launched in early 2008. When the contract came up for renewal, FPSL renegotiated terms with VocaLink and signed the new contract in 2014. FPSL did not run a competitive procurement or undertake market testing during this process.

### LINK

Prior to 2016, VocaLink provided core services for LINK under an evergreen contract – known as the Network Members Agreement (NMA) – between VocaLink and the PSPs of LINK, which had been in place since the functional separation of operator and infrastructure provider in 2006 (see Annex 3). The NMA was renegotiated with VocaLink once, in 2007, following the merger of Voca and LINK Interchange Network Ltd.

In early 2015, LSL ran a closed RFI process to reprocure its core services. This RFI process had some characteristics of market testing (we do not view the process as a competitive procurement exercise – see paragraphs 4.51 to 4.56). LSL selected VocaLink as its preferred provider and it signed the new contract in 2016.

**4.28** We asked the operators why they had not periodically run competitive procurement exercises to reprocure core services over the past 12 years.

**4.29** BPSL told us it renegotiated its contract in 2014 because the existing contract's termination and exit provisions and allocation of intellectual property rights (IPR) would have made it difficult to switch provider. It also said that VocaLink was the only suitable provider at the time. It said it had had regular engagements with European providers through international meetings and seminars, such as EACHA, where it has informal discussions with other providers (typically at the CEO level) about business opportunities, knowledge sharing and best practices information. BPSL said that this engagement had assured it that there were no other adequate or interested providers at the time that could offer the functionally-rich services and bespoke Standard 18 message standard required for Bacs (see paragraph 4.261).

**4.30** FPSL told us that it renegotiated its contract with VocaLink in 2013/14 due to several factors. It said it faced resource constraints due to the implementation of CASS, and was a relatively new organisation at the time with limited staff and little time to organise a competitive procurement exercise.[69] FPSL

69 FPSL was established in 2011 to take over as the operator of FPS. For more details, see paragraphs 3.68 to 3.73.

told us it was subject to external requirements from the Payments Council (now Payments UK). At the time, the Payments Council had power of approval over certain reserved matters for FPS (and Bacs and CHAPS), and wanted the operators to align the termination dates of their infrastructure contracts to a window from mid-2018 to mid-2020 to allow for the possibility of a coordinated move to a new payment systems architecture under its proposed Road Map Strategy in this time frame. This limited the period that FPSL could contract core services to three years. It told us that other providers would not have likely been interested in a short contract period. FPSL added that it has run competitive procurement processes where possible and did so to procure the provision of technical accreditation services and PKI services for the new FPS Access Model.

**4.31** LSL told us that it did not attempt to run a competitive procurement process before 2015 because the previous contractual arrangements for the provision of core services made it difficult to switch to another provider. LSL said that the previous contract was a low protection contract compared with typical commercial outsourcing contracts – it did not include any provision for renewal, termination or exit. Furthermore, LSL said that, under the previous contract, to switch to a new provider, it would have to get all the PSPs in LINK (38 PSPs) to agree to terminate and switch at the same time, which would be difficult to achieve and to coordinate. LSL said it ran the RFI in 2015 because it was planning to make changes to Link Scheme's governance and operational structure to become legally independent from VocaLink and, as part of this, would need to introduce new core services contractual arrangements. It expected that these new arrangements would help to address the barrier to switching. In early 2016, changes to the governance and operational structure were made and the new contract between the new LSL company and VocaLink was signed (see Annex 3). One direct PSP said the LINK RFI process was a genuine attempt to encourage competition using best practice.

**4.32** VocaLink told us that 'shopping around' does not happen in a business-to-business supplier market – such as the market for central infrastructure services – which is characterised by ongoing relationships where a bargaining approach, for example contract renegotiations, can lead to competitive outcomes.

**4.33** FPSL and LSL said they are planning to run competitive procurement exercises for the next contract renewal for core services (around 2020 and 2021, respectively). BPSL said it is planning to run a benchmarking survey as part of its next procurement approach, which it said will help it to interrogate the market and identify any potential barriers for providers. [✂]. It also said that operators should undertake competitive procurement processes where there is evidence that a number of credible providers exist.

### *Views on competitive pressure in the market*

**4.34** Operators, four direct PSPs and VocaLink told us that the operators had been able to negotiate both financial and non-financial benefits in their contract renegotiations with VocaLink. They believed that these negotiations have delivered outcomes similar to what could have been achieved with a competitive procurement exercise. VocaLink and four direct PSPs told us this indicates that there is effective competition in the provision of central infrastructure services. However, one direct PSP said the creation of the PSR had improved the ability of the operators to negotiate more favourably with VocaLink in the latest contract negotiations.

**4.35** Operators said they achieved the following benefits in previous contract renegotiations with VocaLink despite not holding a competitive procurement exercise:

- **For Bacs:** BPSL told us that in 2008 it was able to negotiate a tariff reduction. In the 2014 renegotiation, it said it was able to achieve a [✂]% tariff reduction from [✂] with a cap on tariffs and no indexation applied until [✂] and a discount on the annual service charge. It also negotiated some funding for strategic investment in core services development and the provision of a development fund by VocaLink for future developments. BPSL also negotiated an improvement in SLAs and infrastructure investment commitments, as well as improved contract provisions around IPR, termination rights and liabilities.

- **For FPS:** In the 2014 contract renegotiation, FPSL said it used an external consultancy firm to run an independent cost analysis of VocaLink's cost base and forecast profit margin to give comfort the contract was of fair value. The consultancy firm reviewed all the cost elements in VocaLink's pricing model and, working with FPSL, removed some costs that were considered no longer appropriate in the context of contract renewal – for example, [✂]. The consultancy firm also carried out a benchmarking analysis of VocaLink's profit margin on the FPSL contract. It compared VocaLink's forecast profit against the profit margin of four European providers to make sure that VocaLink's margin would not be excessive (having removed two providers – those with the lowest and highest margin). The benchmarking analysis found that VocaLink's profit margin was in the [✂] range. The final price for the contract was based on the output of the pricing model. FPSL said it also negotiated other price benefits – unit pricing economies of scale with growing volume and cost-effective improvements in the change request process – and improvements in the SLAs.

- **For LINK:** LSL told us that in 2007 when it renegotiated the core services contract, it achieved a [✂] price freeze in exchange for PSPs giving a longer notice period [✂]. It also negotiated an upgrade of back office systems, specifically the implementation of a liability monitoring tool and a real-time enquiring and dispute handling system.

**4.36** In addition to these outcomes noted above, VocaLink gave some other examples of outcomes of the past contract renegotiations in favour of the operators:

- For FPS, [✂].
- For Bacs, [✂].

**4.37** We asked the operators about these examples. FPSL told us [✂]. FPSL added that [✂]. BPSL told us [✂].

**4.38** As a result of the LINK RFI process – which had some characteristics of market testing – LSL was offered a [✂]% discount on the current contract price by VocaLink. [✂]. VocaLink's initial bid did not offer higher SLAs, but in further negotiations, it offered a higher SLA of [✂]% service availability (from [✂]%). VocaLink also offered an improvement in other commercial terms including termination and exit conditions.

**4.39** VocaLink said that it faces a competitive constraint in contract renegotiations and that the operators (as current procurers) have strong bargaining power because VocaLink faces the credible threat that the operators would switch to another provider and it would lose the core contracts. (It noted that the Competition and Markets Authority recognises this type of competitive constraint despite the absence of formal competitive exercise in some of its findings.[70])

**4.40** VocaLink said this credible threat exists because the operators have better outside options available to them (i.e. alternative providers) relative to those available to VocaLink. VocaLink explained that the operators are well informed about their available options for central infrastructure services. It said that the operators – and their member PSPs – are sophisticated customers that are able to gather information about the market and compare alternative providers and offerings available to them. VocaLink added that the operators and direct PSPs have many ways of gaining information about the market outside of a formal market testing or procurement exercise. It said that operators have the capability to be in regular engagement with alternative providers given the number of international tendering processes that have been held and some member PSPs are also active buyers of payment

70 Competition and Markets Authority (formally the Competition Commission) Final Report, *Statutory audit services for large companies market investigation* (15 October 2013): https://www.gov.uk/cma-cases/statutory-audit-services-market-investigation
*Deutsche Borse AG, Euronext NV and London Stock Exchange plc: A report on the proposed acquisition of London Stock Exchange plc by Deutsche Borse AG or Euronext NV* (November 2005):
https://www.gov.uk/cma-cases/london-stock-exchange-plc-deutsche-b-rse-ag-and-euronext-n-v-merger-inquiries-cc.

services and related infrastructure domestically and internationally. As noted in paragraph 4.29, BPSL informally gathers information at international meetings and seminars. VocaLink and one direct PSP said there is evidence, as outlined by us, that there are alternative providers that can compete against VocaLink (see paragraph 4.205).

**4.41** VocaLink told us that outcomes of previous contract renegotiations and the LINK RFI process were to the benefit of the operators and are evidence that the operators have strong bargaining power and that VocaLink faces a competitive constraint (see paragraphs 4.35 to 4.38).

**4.42** VocaLink added that the operators do not necessarily need to have a lot of information about their alternatives as long as VocaLink considers that the threat of losing the core contracts is credible, which it does. It said that its internal documents show that it noted the risk of losing the Bacs and FPS contracts when they were due for renewal in 2015. It added that complaints or indications by the operators that they are considering switching provider will generate this competitive pressure, without the operators needing to take the next step of issuing a tender.

**4.43** VocaLink also said that switching costs are not a barrier to the operators changing providers. It said that translation software reduces the switching costs, in particular those incurred by PSPs to change their internal systems to enable a change in provider (see paragraphs 4.211 to 4.229). However, VocaLink noted that competitive pressure on it can still exist even if there are high switching costs because if a provider loses a customer, it would be difficult to get them back.

**4.44** In contrast to other stakeholders, seven direct PSPs (both shareholders and non-shareholders) believed the operators (as the current procurers) could achieve better prices, and other benefits, if they used more competitive measures to reprocure the core services – for example, tenders. They said this could be achieved either by other providers offering lower prices or by VocaLink responding to competitive pressure.

**4.45** VocaLink and one direct PSP said that improvements in value for money and other outcomes could always be achieved, but that it does not suggest that current outcomes are uncompetitive or detrimental to service-users. One alternative provider said there is little evidence to indicate that there has been a detriment to service-users.

### *Views on increasing competitive pressure*

**4.46** One direct PSP said that competitive procurement exercises are not the only way to drive competitive outcomes. It said that there are other tools that could be used to procure central infrastructure services that could deliver good outcomes, such as contract renegotiations, competitive benchmarking, audit rights and open book contracts. VocaLink noted that it can be more efficient to re-procure through renegotiations with the incumbent because it ensures continued provision of quality and service without the costs and disruptions of a formal procurement exercise. VocaLink added that it would be difficult to achieve significant improvements through competitive procurement as outcomes are already very good given the current market structure. It said to drive significant improvements the market structure needs to change to enable direct contracting between individual PSPs and providers, and reform to payment systems' governance.

**4.47** Two operators and two direct PSPs noted that the Lipis Report – which compares payment systems across 12 countries – found that competitive re-procurement of central infrastructure services is not common in payment systems globally.[71] Two operators and one direct PSP noted that the incumbent provider was always selected in those re-procurement exercises identified in the Lipis report. One operator and two direct PSPs said that we should conduct further analysis of why competitive reprocurements are rare and take this into consideration as there may be real economic factors behind it, such as incumbency advantages. One of these direct PSPs said the high costs and risks of migrating between providers and incumbency advantages – which are natural features of payment

71 Lipis Advisors, *Payment system ownership and access models: Comparative analysis of 13 countries* (December 2015): https://www.psr.org.uk/psr-publications/market-reviews/MR1522-lipis-report

systems – are the reasons that competitive reprocurement is rare. It added that the Lipis report acknowledges that the lack of competitive procurement exercises is due to actual and perceived switching costs.

**4.48** Another direct PSP and the operator of the C&C payment system noted that competitive procurement already happens in payment systems, citing the recent tender of the Future Clearing Model (FCM) for cheque imaging and in overseas markets that VocaLink has participated in.

#### *Summary of stakeholders' views and evidence*

**4.49** In summary, beyond the LINK RFI process, the operators said they had not periodically run competitive procurement processes or even tested the market when reprocuring the core services for Bacs, FPS and LINK. Notwithstanding this, some stakeholders said that previous contract negotiations have delivered improved outcomes and VocaLink believes it faces a competitive constraint. Some stakeholders questioned whether more effective competition could deliver better outcomes.

### Our assessment

#### *How cores services have been procured*

**4.50** As outlined in Box E, none of the operators have held a competitive procurement exercise for reprocuring their core services contract for Bacs, FPS or LINK in the past 12 years. This is despite the contracts for core services provision in each payment system coming up for renewal at least once during this time. We note that FPSL has run competitive procurement exercises for other non-core services, which is encouraging, but it has not previously tested the market for reprocuring its core services.

**4.51** We do not consider the LINK RFI process to be a competitive procurement exercise (which some stakeholders told us they believed it was). In the following paragraphs 4.52 to 4.56, we outline the RFI process and our assessment.

**4.52** At the start of the RFI process, LSL used an external consultancy firm [✂] to shortlist potential infrastructure providers. The consultancy firm identified over 20 organisations that could potentially provide suitable services, then shortlisted four providers that best met the defined criteria (one of which was VocaLink, the incumbent). It gave the shortlisted firms an RFI with seven criteria that their submissions would be evaluated against. The providers were free to decide the content they would present for each of these criteria. The RFI did not provide any additional indications about the content of the presentations. Three providers responded to the RFI – VocaLink, [✂] and [✂]. [✂] LSL offered briefings to all firms from the CEO and Independent Chairman on requirements. This meeting was taken up by the providers that responded. At the end of the process, the selection panel named VocaLink as the preferred provider, in order to enter into further negotiation. Another provider, [✂], was identified as the reserve provider.

**4.53** [✂].

**4.54** In our view, the LINK RFI process cannot be considered a competitive procurement exercise for the following reasons:

- The process was short. Potential providers had only two weeks to prepare their submission after they received the formal letter inviting them to participate. This is a very short period to develop a submission given the complexity of the services being procured.

- The RFI included poor information. It invited the potential providers to carry out a presentation against seven generic criteria, and did not include any technical specification for the services to be provided or service level agreements (SLAs). The RFI also lacked information that could have helped the providers to make detailed proposals.

- The panel only considered the costs and benefits of switching to an alternative provider at a high level.
- The process did not include a consultation with service-users about what services they would value under the core services contract.

**4.55** We also note that the process was open to only a small number of potential providers. While many of the organisations identified by the consultancy firm did not meet all the defined criteria, the process did not allow for the possibility of a joint venture and consortium of bidders. This could have increased the pool of bidders able to meet the selection criteria.

**4.56** The RFI process did have some characteristics of market testing, but for the same reasons outlined in paragraphs 4.54 to 4.55, in our view, it was not sufficient market testing. Nonetheless, the RFI process resulted in some competitive pressure. It gave the LSL and the member PSPs the opportunity to compare the prices and other aspects of VocaLink's (the incumbent provider) services to the potential offerings of other providers. It resulted in improvements in the outcomes as noted in paragraph 4.38. Our review of the LINK RFI process also showed that one other bidder [✂] submitted a bigger discount of [✂]%, compared with VocaLink's offer of [✂]%. One provider submitted a bid with a higher SLA for service availability (of [✂]%) than in the previous contract with VocaLink (and VocaLink's initial bid).

**4.57** We recognise that the operators previously faced resource constraints or switching barriers – those noted in paragraphs 4.29 to 4.31 – in past procurement opportunities.

**4.58** We also acknowledge that operators and PSPs are informed to some extent about the market for central infrastructure services and alternative providers, e.g. through BPSL's engagement with alternative providers at meetings and seminars (see paragraph 4.29). However, because the market for the provision of central infrastructure lacks transparency, procurers must exert some effort to establish what alternative providers and potential services are available and adequately compare them. Even a sophisticated customer who has the ability to compare providers would need information of a nature that facilitates a direct comparison between providers (e.g. to make an assessment on a like-for-like basis). Because this market lacks transparency, procurers and providers must exert some effort to establish what alternative providers and potential services are available and adequately compare them. To date, the operators or PSPs have not even run a sufficient market-testing exercise to verify whether a provider could be a credible option and adequately compare VocaLink's offerings to alternative proposals. Therefore, operators (as current procurers) are not fully informed about alternative – and potentially more efficient and innovative – infrastructure services.

### *Competitive pressure*

**4.59** We acknowledge that operators have sought to deliver improved outcomes in past contract renegotiations (see paragraph 4.35).

**4.60** However, we note that these outcomes were achieved in an environment with no effective competition. A credible threat to change provider could produce a competitive constraint on VocaLink and give the operators bargaining power in a contract renegotiation. However, we do not find that there is a credible threat. We outline this in the following paragraphs.

**4.61** An important prerequisite for the operators to have bargaining power in the negotiations (i.e. buyer power) and credibly threaten that they would switch provider, is that they know what alternative options are available to them and they gather detailed information to be able to adequately compare alternative providers and what they could offer (see paragraphs 4.19 to 4.21). However, as noted in paragraphs 4.50 to 4.58, we find that the operators have not done this.

**4.62** Furthermore, in the current ownership arrangements, we recognise that the negotiation between an operator and VocaLink is in effect a negotiation between the shareholder PSPs (those that are shareholders of VocaLink), who collectively control both VocaLink and the operator. We believe, based on our review of VocaLink board minutes, that VocaLink has recognised this. It noted that [✂]. We also found other instances in VocaLink's board minutes where the VocaLink board has proposed addressing certain issues with the contract renewal negotiations by using the influence of their shareholder PSPs (see paragraphs 6.108 to 6.110).

**4.63** Our review of documents [✂] used in the negotiation between LSL (on behalf of NMC) and VocaLink following the RFI process suggests that LSL did not have strong bargaining power. [✂] noted that while LSL successfully negotiated some important concessions from VocaLink, LSL had to acquiesce on several terms and provisions during the negotiations to be able to reach final agreement with VocaLink. Some examples [✂] highlighted were:

- [✂]
- [✂]

**4.64** [✂] also noted that a number of provisions or terms do not reflect what would be considered as 'market practice' (see paragraph 4.232).

**4.65** We also note the special circumstances in which the LINK contract negotiations were held, where LSL was negotiating the legal separation of Link Scheme from VocaLink alongside reprocuring core services for LINK under a new contract.

**4.66** We acknowledge that VocaLink has previously recognised the risk of losing the core contracts for Bacs, FPS and LINK. However, VocaLink did note in its internal documents that the risk was lower for [✂], because it perceived that [✂]. Furthermore, our review of VocaLink's internal documents suggested that VocaLink was willing to respond to the threat of losing the Bacs and FPS contract when they were due for renewal in 2015. VocaLink's response to the threat of losing the Bacs and FPS contracts was twofold. Firstly, to enhance its existing service (which included investing to upgrade the underlying infrastructure), and secondly, to improve customer satisfaction. It also lobbied the operators to persuade them that it provides good value for money, can deliver propositions that meet their needs and objectives, and is the lowest risk option for a provider. VocaLink also responded to the pressure exerted through the LINK RFI (see paragraph 4.38 and 4.56).

**4.67** However, while VocaLink may have an incentive to provide a sufficiently competitive offering to keep the contract, this does not mean that its offering is competitive relative to the proposals that could be offered by VocaLink or alternative providers in a more competitive environment. This can only be determined by testing the market. We also note in paragraph 4.56 that another provider in the LINK RFI offered a lower price, and that higher SLA than VocaLink's initial bid was also offered by another provider. Furthermore, [✂].

**4.68** Given the lack of competitive procurement, or even sufficient market testing, and the evidence outlined here, we find that VocaLink faces limited competitive pressure. As a consequence, it has reduced incentives to suggest ways of being more efficient and innovative.

### *Increasing competitive pressure*

**4.69** In response to those stakeholders' views in paragraph 4.47, we acknowledge that it is not common in other countries to hold competitive reprocurement exercises and that in those instances identified in the Lipis report, the incumbent was awarded the contract.[72] However, this does not imply that it is not possible to hold a competitive reprocurement exercise. We note that the stakeholder that believed that the Lipis report noted that the lack of competitive procurement exercises is due to

72 Lipis Advisors, *Payment system ownership and access models: Comparative analysis of 13 countries* (December 2015), page 29: https://www.psr.org.uk/psr-publications/market-reviews/MR1522-lipis-report

actual and perceived switching costs had misinterpreted the report's conclusions (see paragraph 4.47). The Lipis report does note that communities of banks are reluctant to switch providers for an established payment system, but it does not conclude that this is the reason for the lack of competitive procurement.

**4.70** There have been several examples of competitive procurement exercises for new systems – for example, the tender for FPS, Australia's and Singapore's faster payment systems, and more recently, the FCM for cheque imaging. These examples show that it is possible to run a competitive procurement exercise for core services.

**4.71** It is true that a contract renegotiation and the other tools highlighted by one direct PSP (see paragraph 4.46) can be used to drive improved outcomes when reprocuring with an incumbent provider, and avoids the costs and risks of switching, such as those related to the changes PSPs must make to internal systems (see paragraph 4.211). However, these situations forgo the potential further benefits of introducing competition by comparing available alternative options and of switching provider. In particular, contract renegotiation may not fully capture the dynamic benefits available from exploring whether other providers could offer more innovative services that better meet user needs. Also, a competitive procurement can in principle be designed to factor in the cost of switching, and therefore result in a switch only when the benefits of switching exceed the costs of doing so.

**4.72** We acknowledge stakeholders' comments regarding various tools and procurement methods that could drive improved outcomes and further analysis of competitive procurement. These are issues that we consider best form part of a detailed remedies assessment.

#### *Summary of our assessment*

**4.73** Overall, we find that there is currently no effective competition in the market for the provision of central infrastructure services. The operators (as current procurers) have not held competitive procurement exercises for reprocuring core services. Nor have they, at a minimum, sufficiently tested the market or attempted to introduce effective competition through other approaches (see paragraphs 4.19 to 4.21). As a result, they have not been fully informed about alternative – and potentially more efficient and innovative – infrastructure services. We also find that, as a result, the incumbent provider has faced limited competitive pressure and reduced incentives to provide more efficient and innovative services. Therefore, we do not observe processes that would ensure that the outcomes observed meet the current and ongoing needs of all service-users. This also means that the full ongoing benefits of competition are unlikely to be achieved (as outlined in paragraph 4.1 to 4.3).

### Incentives to test the market or competitively procure

#### *Stakeholders' views and evidence*

**4.74** Some operators and direct PSPs commented on our findings outlined in our interim report regarding operators' incentives to seek alternative offerings and drive effective competition such as through competitive procurement. They also commented on the incentives of direct PSPs – as the main users – to encourage the operators to do so. In the interim report, we noted that operators do not have a strong incentive because they are not-for-profit (so can simply pass on costs to PSPs) and may also place a disproportionate weight on avoiding risk that making changes regarding the provision of core services could introduce. We noted that direct PSPs do not have a strong incentive because they do not derive any competitive advantage over other PSPs from competition for central infrastructure provision and perceive that it could be costly and risky to make changes to connect to a new provider.

**4.75** Two operators did not believe that the operators have a limited incentive to drive effective competition because they are not-for-profit and can simply pass on the cost of infrastructure provision to the direct PSPs. They said that they have sought to deliver the best value for money for their members despite their not-for-profit status. One operator noted it was the board's fiduciary duty to deliver the best outcomes. As evidence of its actions to drive value for money, FPSL noted that it:

- undertook a cost-base analysis in the previous renegotiation with VocaLink to ensure value for money was achieved (see paragraph 4.35)
- has run competitive procurements for other services (see paragraph 4.30)

**4.76** One direct PSP said that keeping costs down is a key focus for all operators and PSPs and they are incentivised to do so. It highlighted academic literature that it believes supported this view.[73]

**4.77** Two operators and three direct PSPs did not believe that operators place disproportionate weight on security and resilience in core services and therefore are reluctant to make changes. BPSL and FPSL noted that they place importance on operational integrity and resilience because they must ensure the payment system and its infrastructure complies with the CPMI-IOSCO principles for Financial Market Infrastructures on security and resilience.[74] FPSL noted that, notwithstanding the importance it places on security and resilience, it has negotiated for specific changes in recent years (see paragraph 4.165). Another operator and two direct PSPs disagreed that operators are reluctant to make changes to core services and innovate (see paragraphs 4.164 to 4.166). One direct PSP said there was no evidence that operators place a disproportionate weight on avoiding risk. Two direct PSPs said that it is appropriate that the operators have a low appetite for risk to security and resilience. One of these direct PSPs said operators' and PSPs' focus on stability and resilience is a unique and natural feature of markets for payment systems and services which should be taken into consideration. Two direct PSPs questioned what we consider an appropriate level of risk appetite that the operators should have. One direct PSP questioned how a competitive procurement exercise would address the issue of operators placing disproportionate weight on risk, if one assumed they did.

**4.78** In contrast, VocaLink noted that the current market structure – where central infrastructure is collectively procured – dampens the operators and PSPs' incentives to innovate. It said that if the market structure changed to enable direct contracting between individual PSPs and providers, PSPs would have greater demand for innovation to gain a competitive advantage over their competitors in the downstream retail banking market.

**4.79** In summary, some operators and direct PSPs do not believe the operators have a limited incentive to drive effective competition. They said that operators and direct PSPs have sought to drive improved outcomes and they do not believe that operators place a disproportionate weight on security and resilience at the expense of making changes regarding the provision of central infrastructure services.

### *Our assessment*

**4.80** We recognise the evidence that operators have sought to drive improved outcomes in past contract negotiations for core services (see paragraph 4.35). However, we consider that the operators do not have a strong incentive to drive effective competition. We also consider that the direct PSPs do not have a strong incentive to encourage operators to drive effective competition. This is because the interests of the operators and direct PSPs are not fully aligned with all service-users' interests. While interests are likely to be aligned with respect to service disruptions, operators and the direct PSPs do not internalise, or place value on, a significant amount of the benefits of effective competition, such as reduced costs or increased functionality in core services. We explain our reasoning for both operators and direct PSPs in the following two paragraphs.

**4.81** The operators do not have fully aligned interests with all service-users because they, especially BPSL and FPSL, face limited competitive constraint from other payment systems (see paragraph 4.17 to 4.18). This, combined with their not-for-profit status, means that they do not have a strong

73 Sveriges Riksbank Economic Review 2003:4, Bergman M.A., *Payment system efficiency and pro-competitive regulation* (2003), pages 25 to 52: http://www.riksbank.se/Upload/Dokument_riksbank/Kat_publicerat/PoV_sve/sv/2003_4.pdf

74 As of May 2016, the CPMI-IOSCO principles also apply to the LINK payment system.

incentive to drive effective competition in the provision of central infrastructure services that would deliver benefits such as reduced costs or increased functionality. The operators are, understandably, conscious of maintaining the operational integrity and resilience of the core services, which we support. The Bank also has a regulatory role relating to resilience and risk (see paragraphs 6.143 to 6.144). We do not believe there is necessarily a trade-off between innovation and resilience – it may be possible to have innovation without reducing resilience. However, given interests are not fully aligned, the operators do not have strong incentives to adopt new innovations alongside maintaining or improving resilience.

**4.82** Direct PSPs do not have a strong incentive to encourage operators to drive effective competition because, under the current model, cost reductions or benefits of increased functionality will accrue to all the direct PSPs. Therefore, PSPs will not gain a direct competitive advantage from such improvements in the downstream retail banking market. (Although some may be able to make better use of increased functionality in the services they provide to their customers.) PSPs are therefore in general unlikely to appropriate much of the value of such improvements, even if there are material benefits to all users, and are therefore unlikely to internalise a significant amount of the benefits of effective competition. Furthermore, direct PSPs believe it could be costly and risky to make changes to their internal systems to connect to a new provider (see paragraphs 4.211 to 4.214). Also, the cost of core services is low compared to the overall costs they incur to provide payment services. Therefore, a lower cost of core services may not be enough of an incentive for direct PSPs to pressure operators to hold competitive procurements or even test the market. We note that direct PSPs use competitive procurement exercises where they directly procure infrastructure services from providers, such as non-core services like gateway solutions (see paragraph 5.24). For these services, direct PSPs can achieve a competitive advantage over their competitors, so they have a stronger incentive to seek out alternative offerings.

**4.83** Furthermore, our review of VocaLink's internal documents shows that VocaLink acknowledged that PSPs may be reluctant to undertake a procurement exercise. For example, in its board minutes [✂].

**4.84** As set out in paragraph 4.76, one direct PSP cited an academic paper as support for the claim that operators and PSPs have an incentive to keep costs down. The academic paper does find that operators and PSPs are incentivised to drive down costs of payment infrastructure services. However, we note that the academic paper is based on the premise that there is competition between payment systems and that PSPs would move their transactions between payment systems if operators did not optimise outcomes.

**4.85** Overall, we find the operators (as the current procurers) and PSPs do not have a strong incentive to drive, or encourage, effective competition in the provision of central infrastructure services.

## Value for money

**4.86** In a well-functioning market, we would expect customers to receive good value for money. To assess whether the current market arrangements are delivering good outcomes for operators and PSPs, we examine the price and value for money that they get from VocaLink. We have not carried out a cost benchmarking analysis; instead we have used the views of stakeholders and other evidence to assess value for money.

## Stakeholders' views and evidence

**4.87** We asked operators and direct PSPs about their views on VocaLink's prices and value for money for the provision of core services. The operators and many direct PSPs said they are satisfied with the value for money they receive from VocaLink, given the high quality of service it provides. (This included VocaLink shareholders and non-shareholders alike.) One direct PSP thought that a provider offering a lower price would likely provide a lower quality of service. VocaLink and two direct PSPs said that those stakeholders' views on the value for money (and also service quality and innovation) they receive from VocaLink should be considered as evidence of good outcomes.

**4.88** As noted in paragraph 4.34, the operators, four direct PSPs and VocaLink told us that the past contract renegotiations have delivered outcomes (both financial and non-financial benefits) similar to what could have been achieved with a competitive procurement exercise.

**4.89** As a result of the LINK RFI process, LSL was offered a price discount (as noted in paragraph 4.38). Three PSPs (two shareholders of VocaLink and one non-shareholder) said that VocaLink's RFI response was competitively priced. LSL, VocaLink and one PSP added that the selection of VocaLink as preferred provider suggests VocaLink offers the best overall value for money (when considering other factors of service provision). However, LSL acknowledged that a competitor offered a bigger discount than VocaLink.

**4.90** In contrast to most stakeholders, two direct PSPs (one shareholder of VocaLink and one non-shareholder) and some infrastructure providers perceived VocaLink's services to be expensive. They said this reflects VocaLink's old infrastructure architecture, which requires high maintenance and change costs. One operator, while satisfied with the value for money, noted that VocaLink's old architecture resulted in higher prices.

**4.91** One direct PSP believed that the lack of competition for the provision of core services gives VocaLink market power, which has resulted in high prices for core services. It said this was shown by the higher price of VocaLink's central infrastructure services compared to its other products and services where VocaLink faces more competition, although, an operator said that it is incorrect to compare prices for VocaLink's core and non-core services as the services are different.

**4.92** We asked operators and direct PSPs if they had directly compared the value for money they receive from VocaLink for the core services with that of other central infrastructure providers (outside the LINK RFI process). Two operators and five direct PSPs said it is difficult for them to make direct comparisons as there are no other providers offering exactly these services. However, some operators and direct PSPs said they have used various other methods to consider whether they receive value for money from VocaLink:

- As noted, FPSL said it used a cost base analysis to ensure VocaLink was offering fair value, which included the benchmarking of VocaLink's profit margin (see paragraph 4.35). One direct PSP considered that this process ensured FPSL received value for money and a competitive offer. BPSL and FPSL also have contractual provisions for the right to be provided with an independent financial audit of VocaLink's services (including permission to go onto VocaLink's premises for those auditors). BPSL and FPSL told us they have not found it necessary to exercise this right. FPSL said this is because VocaLink's approach to charging is transparent and does not require external independent audit. It added that it receives an IASE3000 audit report every year, which is used to give comfort on the presence and effectiveness of the VocaLink operations and security controls environment (it is not used to assess value for money).

- Two direct PSPs with international operations compared VocaLink's prices for core services to the prices they pay for core services in payment systems in other countries. They noted that differences in the services and transaction volumes mean they cannot compare the prices exactly. However, taking these differences into account, they believed VocaLink's prices were reasonable compared to some payment systems but higher than the SEPA payment system.

- Another direct PSP referred to VocaLink's pricing when bidding to provide central infrastructure for the FCM for cheques. It said this procurement exercise showed that VocaLink was not as competitive as other bidders. However, an operator believed that concluding this was premature because the infrastructure services procured through the tender have not yet been delivered. It said that the value for money provided by a bidder must be judged after the services have been delivered and the actual costs and running costs are assessed.

**4.93** VocaLink highlighted other evidence that it offers good value for money. It highlighted that the Lipis report suggests that pricing for UK payments processing is comparable with the Euro payment systems but that the functionality is greater in the UK. VocaLink believed this is consistent with good value for money.

**4.94** Some stakeholders comment on the scope for more competition to drive better outcomes.

**4.95** One direct PSP questioned whether VocaLink made profits on its provision of core services. It told us that VocaLink earns relatively low revenues on its core contracts but must make relatively large periodic capital investments and is subject to volume risk from new or existing competing payment systems that VocaLink does not provide infrastructure services for. It also noted that VocaLink has been recapitalised on a number of occasions when its profitability was inadequate.

**4.96** VocaLink provided estimates of its internal rate of return (IRR), return on capital employed (ROCE) and weighted average cost of capital (WACC) on its core services for Bacs, FPSL and LINK from 2011 forecast out to 2017 (see Annex 10).[75] VocaLink employed an economic consultancy to calculate its IRR and WACC. The consultancy made some judgements and assumptions to arrive at the estimates (we did not make any adjustments). The IRR, ROCE and WACC estimates show that, on both an IRR and ROCE basis, VocaLink's profitability on its core contracts has been [✂] in excess of its WACC over the past five years. The estimates for the projected period to 2017 show that its profitability on its core contracts is expected to be [✂] in excess of its WACC over the projected period.

**4.97** One direct PSP said that it is difficult to draw conclusions from VocaLink's profitability estimates for two reasons. First, the evidence is redacted in our interim report. Second, it said that the profitability estimates should be adjusted to reflect any necessary judgements and or assumptions, which it believed had not been done.

**4.98** Three alternative infrastructure providers that we spoke to told us they believed that they could provide central infrastructure services in the UK at a competitive price. Two direct PSPs suggested this is evidence that not many alternative providers can match VocaLink's prices and that VocaLink's offerings are competitive.

**4.99** VocaLink and two direct PSPs believed that we should provide evidence of what better outcomes could be achieved, such as through a competitive procurement exercise. They consider the potential improvements to be limited given the current good outcomes.

**4.100** Two operators said that competitive procurement could lead to downward pressure on prices, but price is not the only or most important factor when procuring – security and resilience is imperative. One direct PSP and one IAD believed that, given central infrastructure costs are small relative to the overall cost of payments infrastructure, there would not be significant overall cost savings for service-users from running a competitive procurement process.

**4.101** Operators and some direct PSPs gave their views on the value for money they receive from VocaLink on change requests. This included change requests as part of the core services contract (requested by the operators) and change requests of individual direct PSPs for specific developments (that is, non-core services). The pricing of change requests is determined by an agreed 'day rate' and the number of work days required, therefore the resulting price can be negotiated around the work days required.[76] For change requests under core services, the operators and VocaLink agree the day rate during contract negotiations.

**4.102** Four direct PSPs (all larger PSPs, three of which are shareholders) and one operator said VocaLink's pricing on change requests is fair. For change requests related to non-core services, six direct PSPs (including two smaller PSPs) told us that VocaLink's pricing is reasonable. Four direct PSPs said

75 IRR and ROCE are the standard profitability measures used by the Competition and Markets Authority. These measures take into account the capital required to run a business. Therefore, they can give an economically meaningful measure of profitability on an ex-post basis when compared with WACC.

76 The day rate is the set charge per day of work that VocaLink uses to cost a change request.

that VocaLink is willing to work with the operators or individual direct PSPs to find a cost-effective solution for a change request, even if it could have charged a higher price. One direct PSP said that VocaLink's pricing for change requests is competitive after accounting for risk premiums, given that the specific technical requirements for a change are uncertain at the time the quote is prepared. Two direct PSPs said that change request costs could be high initially, but they could usually negotiate a lower price.

**4.103** However, one operator said the request process for small change requests could be made more efficient, which would result in lower costs (see paragraph 4.130).

**4.104** We asked operators and direct PSPs if they were able to benchmark the value for money they receive for change requests. One operator and two direct PSPs said they use internal knowledge and expertise to evaluate VocaLink's proposed solution, the work days required and the resulting cost (based on the agreed day rate). The operator uses IT industry benchmarks to agree the day rate. The operator questioned whether more competition could drive a better outcome for change requests to core services because these changes must be made by the current provider of the core services – it cannot seek offers from alternative providers. It said that it can only drive a better outcome by reviewing the work days proposed and negotiating with the current provider on this.

**4.105** In summary, most operators and direct PSPs believed they receive good value for money from VocaLink. They believed that previous contract negotiations have delivered outcomes similar to what could have been achieved with a competitive procurement exercise. However, they told us it is difficult for them to directly compare VocaLink's offerings with other infrastructure providers given the specific features of the payment systems.

### *Our assessment*

**4.106** We acknowledge that most stakeholders perceive that previous contract negotiations have achieved good value for money. We also acknowledge that operators have secured price discounts (and other positive outcomes) in previous contract renegotiations with VocaLink.

**4.107** However, as outlined in paragraphs 4.50 to 4.73, there is currently no effective competition driving the best outcomes for all service-users.

**4.108** We do not consider that the Lipis report constitutes evidence that the provision of core infrastructure services in the UK is competitive. The Lipis report does not compare UK pricing to that of the US and Euro payment systems. The Lipis report states that prices in the US and the Euro area are similar to each other, but the functionality that payment systems in these geographical areas offer is not comparable to the functionality in the UK. As such, the Lipis report does not support VocaLink's contention outlined in paragraph 4.93. The Lipis report also notes that it is difficult to compare prices as this information is generally commercially sensitive.[77] Furthermore, the Lipis report does not assess whether competition is effective in driving outcomes, such as value for money.

**4.109** Also, [✂].

**4.110** We do not believe the operators and direct PSPs have gathered adequate information to directly compare the prices and value for money that different providers can offer (see paragraph 4.50 to 4.58). Therefore they cannot determine if they could receive a better price.

77 Lipis Advisors, *Payment system ownership and access models: Comparative analysis of 13 countries* (December 2015), page 27 and 32: https://www.psr.org.uk/psr-publications/market-reviews/MR1522-lipis-report

**4.111** Other methods, noted in paragraph 4.92, that operators and direct PSPs use to judge value for money do not adequately compare what other providers could offer Bacs, FPS and LINK. This is because:

- Cost analyses, profit benchmarking and audits of VocaLink prices show whether VocaLink is earning excessive margins or is charging correctly. However these methods do not compare VocaLink's prices or value for money with alternative providers. These methods do not determine whether VocaLink offers a competitive price or good value for money. In addition, the margin on an individual contract, or class of contracts, could be quite different from a firm's overall margin.
- Evaluating VocaLink's pricing for Bacs, FPS and LINK against the pricing for other payment systems is not a direct comparison, as provision of the services and market conditions can differ significantly between payment systems.

**4.112** For change requests related to core services, we acknowledge that at the time of signing a contract with a provider, the operator (as the current procurer) cannot have full information on what change requests will ultimately cost and how well they will be provided (see paragraph 4.104). Notwithstanding this, as noted in paragraph 4.102, the larger direct PSPs told us they are satisfied with VocaLink's pricing (although most are shareholders of VocaLink). We note that the costs are apportioned to direct PSPs depending on their relative size – larger direct PSPs pay more than smaller direct PSPs, but the smaller direct PSPs did not provide us with views on this. However, two smaller direct PSPs told us they are satisfied with VocaLink's pricing for change requests related to non-core services (see paragraph 4.102).

**4.113** We consider there is scope for more competition to drive better outcomes, for the following reasons.

**4.114** On the one occasion where an operator ran a process with some characteristics of market testing – the LINK RFI – LSL was able to compare the offerings of the bidders and make a more informed judgement about each offering. As noted in paragraph 4.38 and 4.56, LSL was offered financial and non-financial benefits through the RFI process and VocaLink was willing to respond to the pressure exerted as a result of this process.

**4.115** VocaLink's estimates of its IRR, ROCE and WACC indicate that its profitability on its core services contracts has been, and is expected to be, in excess of its WACC (see paragraph 4.96). This suggests that there is scope for the operators (as the current procurers) to receive better value for money. We note that certain assumptions made by VocaLink's chosen consultancy produce a conservative estimate of profitability. Therefore, the profitability estimates may be below the true level of profitability.

**4.116** In response to the concern raised by one direct PSP in paragraph 4.95, we also note that the WACC will reflect the return required by investors, reflecting the risk in the business.

**4.117** VocaLink's own internal benchmarking of operating profit margins shows that [✂] of its European competitors. We note that the cost analysis for FPSL showed that VocaLink's forecast profit margin on FPS core services is within [✂] benchmark range compared with some of its European competitors (see paragraph 4.35).

**4.118** Furthermore, we note that VocaLink and eight PSPs acknowledged that improvements to outcomes could be achieved with more competition (see paragraphs 4.44 to 4.45).

**4.119** In summary, most operators and direct PSPs are satisfied with the value for money they receive. However, there is currently no effective competition that would drive the best outcomes for all service-users. Furthermore, there is scope for competition to drive better outcomes.

## Quality of service

**4.120** We would expect a well-functioning market to deliver good quality services that customers are happy with. We examine the quality of service provided by VocaLink to assess whether the current market arrangements are delivering good outcomes for operators and PSPs.

### *Stakeholders' views and evidence*

**4.121** We asked the operators and direct PSPs for their views on the quality of service provided by VocaLink for the core services for Bacs, FPS and LINK. The operators and many direct PSPs (both shareholders and non-shareholders) were very positive about the quality of service. They stated that VocaLink's services had been highly resilient and stable. The direct PSPs said these are their main priorities given the significant impact that payment service outages can have on their customers. None of the operators or direct PSPs said they are dissatisfied overall with VocaLink's services.

**4.122** VocaLink said that in past contract negotiations for Bacs, FPS and LINK (including the negotiations following the RFI process) the operators made it clear that they were satisfied with the service quality and most of the negotiations focused on commercial aspects (e.g. pricing).

**4.123** VocaLink is contractually obliged to meet various service level agreements (SLAs) defined in the core services contracts negotiated with the operators. If it does not, VocaLink is liable for financial penalties. These SLAs cover the provider's service provision in terms of system availability and performance of the:

- central clearing functions (payment processing and message transmissions)
- communication channel interfaces (that PSPs and other users may use to connect into the central clearing)
- back-office functions (such as reporting)
- settlement functions

The SLAs also include measures of customer service, such as the percentage of service desk calls required to be answered within a certain time.

**4.124** The operators and many direct PSPs told us that VocaLink had met or exceeded its SLAs for system availability and performance. They added that VocaLink had agreed to tighten these SLAs in past contract negotiations. One operator and one direct PSP said that VocaLink's performance against the SLAs demonstrated its high service quality. Seven direct PSPs said the number of outages caused by VocaLink had been negligible, and were usually resolved efficiently without affecting customers. Five PSPs said that such problems had usually been caused by other parties (usually the PSPs themselves).

**4.125** Two operators and seven direct PSPs said VocaLink provided good customer and monitoring support and was responsive to their demands on both the core services and non-core services. One direct PSP added that on previous occasions, VocaLink had helped to resolve acute issues specific to an individual PSP.

**4.126** VocaLink runs an annual internal customer satisfaction survey [✂]. The survey showed the majority of VocaLink's customers have been very satisfied with its service over the past six years – and more so since the introduction of its specialised customer engagement team in 2013. VocaLink said that its 2015 survey showed that 91.9% of its customers gave it 8 out of 10 and above on their satisfaction with VocaLink's services. One direct PSP said this is evidence of VocaLink's service quality. VocaLink said this is consistent with competitive outcomes.

**4.127** BSPL and VocaLink noted that the Lipis report highlights the rich functionality of UK payment systems compared to most other countries. VocaLink attributed this rich functionality to the quality of and investment in its underlying payments infrastructure.

**4.128** In contrast to most, one direct PSP told us that the lack of competition dampened VocaLink's incentives to provide a more competitive service, and that there was better service provision in some other payment systems (such as the cards systems).

**4.129** Two operators, two direct PSPs (both shareholders) and one infrastructure provider raised issues with certain parts of VocaLink's services. A few said some back-office functions and related services needed to be upgraded or further developed:

- LSL said the LINK ATM database architecture was old and lacked flexibility.
- A direct PSP said that FPS back-office functions are performed on a batch basis (while the front end is real time) which limited potential for growth in capacity and enhanced back-office services such as reconciliation.
- An infrastructure provider said there was scope to automate some processes related to Bacs 'A' services, improve the acknowledgement of payment initiation files submitted through the DCA channel in FPS, and more generally, enhance fraud checking and reporting functionality.

**4.130** One operator and direct PSP said that VocaLink had performed poorly at times when delivering major change programmes that have affected availability of related services. The operator did say that VocaLink had made some improvements in this area in the past few years. Another operator said the approach used to process smaller change requests could be made more streamlined or flexible – which should mean a more proportional delivery time and cost for smaller changes. For example, currently both large-scale changes and smaller enhancements have to go through the same rigorous development and testing process.

**4.131** In response to these views on issues with VocaLink's services noted in paragraph 4.129, one direct PSP said that the concerns related to less important functions in the central infrastructure and should be considered minor issues in comparison to those PSPs and operators that consider the service quality to be good. FPSL said that it had not been approached by any PSPs about issues with or potential improvements to the back-office functions of FPS in line with those raised by the stakeholders in paragraph 4.129. It noted that the processing model used in back-office functions were designed to reflect the processing requirements of corporate originators, and DCA submitters do get acknowledgement of receipt of payment files (provided on a batch basis). With regards to the potential to limit volume growth or capacity, it said VocaLink is contractually responsible to ensure the SLAs regarding volumes (transactions per second) are met, and it does. [✂].

**4.132** We compared data for the past five years on VocaLink's service provision in terms of system availability and performance of certain functions against the SLAs defined in the core contracts (see Figure 6). The functions we looked at were central clearing functions, communication channel interfaces, back-office functions, and customer service.

***Figure 6: Quality of service measures for Bacs, FPS and LINK***

[✂]

**4.133** During this period, VocaLink has met its SLAs for system availability and performance for the central clearing functions for Bacs, FPS and LINK.

**4.134** When we looked at its performance for system availability and performance in other areas (such as back-office functions and communication channel interfaces), we found that VocaLink had always met these SLAs, with four exceptions:

- **For LINK:** On two consecutive occasions VocaLink did not meet its SLA for availability of a back-office function. [✂].
- **For FPS:** On two separate occasions VocaLink did not meet the SLAs for the availability of a communication channel interface used by indirect PSPs. [✂].

**4.135** VocaLink has met its SLAs related to customer service over the past five years.

**4.136** One direct PSP said that alternative providers that currently operate in other payment systems are likely to provide a high quality of service. The Lipis report showed that service quality is an important factor for those procuring central infrastructure services, and that providers are expected to demonstrate a track record of high-quality service to even be considered by those procuring the services.[78] The direct PSP added that the report does not suggest that VocaLink's service quality is inferior to international norms, as no adequate comparison of service quality has been done. It added that it is unlikely that the high service quality elsewhere was driven by competition, given the lack of competitive procurement globally.

**4.137** Overall, the operators and direct PSPs have been satisfied with VocaLink's services in the past and performance against its SLAs particularly within the main functions of the core services. Some stakeholders raised a small number of issues related to VocaLink's back-office functions and change request processes.

## Our assessment

**4.138** We acknowledge stakeholders' views that they receive a good quality of service from VocaLink and that VocaLink has almost always met its SLAs. We also acknowledge that the Lipis report finds that UK payment systems are functionally rich compared with most other payment systems considered (see paragraph 4.127). However, as outlined in paragraphs 4.50 to 4.73, there is currently no effective competition driving the best outcomes for all service-users.

**4.139** As noted in paragraph 4.108, the Lipis report does not constitute evidence that the provision of infrastructure services in the UK (or elsewhere) is competitive. We also note that VocaLink's customer satisfaction survey, noted in paragraph 4.126, is based on aggregate satisfaction of VocaLink's business contacts. It is therefore unlikely to reflect end users' satisfaction. Given the interests of operators and direct PSPs are not fully aligned with all service-users (see paragraphs 4.80 to 4.85), the absence of any improvements for end users may not negatively affect the satisfaction of direct PSPs in the survey. For these reasons the customer satisfaction survey is not an appropriate measure of how satisfied users are with VocaLink's provision of core infrastructure services. We therefore attach little weight to the results of the customer satisfaction survey in our assessment.

**4.140** Regarding the views on VocaLink's support to individual direct PSPs experiencing issues in paragraph 4.125, we note that it is in the interest of VocaLink and other direct PSPs that these issues are resolved quickly, as disruption to one direct PSP could lead to payment disruptions for other PSPs and the wider payment system.

**4.141** By introducing effective competition, the operators (as the current procurers) may be able to obtain higher service quality. VocaLink or alternative providers may be willing to deliver on more ambitious SLAs or improved service quality in other ways.

78 Lipis Advisors, *Payment system ownership and access models: comparative analysis of 13 countries* (December 2015), page 32: https://www.psr.org.uk/psr-publications/market-reviews/MR1522-lipis-report

**4.142** We acknowledge stakeholders' views that the benefits of higher service quality may be marginal, given the current high level. However, there is evidence that VocaLink is willing to respond to competitive pressure in terms of service quality. This was demonstrated in its response in the LINK RFI process, which had characteristics of market testing and resulted in some competitive pressure. Our review of the LINK RFI process shows that VocaLink was willing to respond competitively and offer tighter SLAs in response to competitive pressure from another bidder (see paragraphs 4.38 and 4.56). We note that the other bidder offered a higher SLA than VocaLink's initial offer. Furthermore, as noted in paragraph 4.136, the Lipis report finding that alternative providers to other payment systems appear to provide a high quality of service suggests that they would be able to compete against VocaLink in this respect.

**4.143** We acknowledge that the issues raised in paragraph 4.129 about VocaLink's services related to non-essential functionality and were raised by only a few participants. However, by not sufficiently testing the market, the operators (as current procurers), are not aware of potentially-improved functionality that alternative providers may be able to offer. More competitive pressure would also increase VocaLink's incentive to proactively address service issues identified by stakeholders that may not have been a priority for VocaLink (or the operators), such as issues relating to back-office or lower priority services. Although, as noted in paragraph 4.176, VocaLink is limited contractually in its ability to make changes to the core infrastructure unless authorised by the relevant operator.

**4.144** Overall, stakeholders perceive they receive good service quality from VocaLink. However, there is currently no effective competition that would drive the best outcomes for all service-users and ensure that ongoing benefits of competition are achieved. Furthermore, there is scope for competition to achieve improved outcomes.

## Innovation

**4.145** In a well-functioning market, we would expect competitive rivalry to incentivise firms to innovate in order to win new business, gain market share and increase profits. We assess the level of innovation by VocaLink in the provision of central infrastructure services.

## Stakeholders' views and evidence

### *Innovation in the UK*

**4.146** Many stakeholders believed that UK payment systems are innovative. They told us that the Lipis report suggests that UK payment systems are among the most innovative in the world, and offer richer functionality and product diversity than other countries. One direct PSP commented that there are significant innovations in the UK that are not yet in Europe, such as real-time payments, 24 hour availability and direct submission for Bacs payments, Paym and CASS services.

**4.147** We asked the operators, direct PSPs and VocaLink for examples of innovative developments in infrastructure services. Most operators and direct PSPs perceived VocaLink to be innovative and identified several examples of innovative developments that VocaLink has initiated. However, most of the examples provided by operators, direct PSPs and VocaLink are of developments in areas outside of the core services. These developments reflect VocaLink's commercial ventures, including:

- [✂]
- selling IPS products in the US and Singapore (which are ISO 20022 compliant)
- ACH clearing for Bankgirot in Sweden
- development of Zapp [✂]

- [✂]
- directory services offered to PSPs and corporates

**4.148** Operators, direct PSPs and VocaLink gave limited examples of innovations in core services proposed by VocaLink (outside of general maintenance). Their examples of innovations in core service include:

- new payment services such as charity donations made via Bacs, [✂] and point of sale transactions through LINK
- fraud reporting on LINK transactions
- Paym over LINK
- mobile phone top-up at point of sale
- the enabling of the independent ATM deployment model, which has been supported by LINK and VocaLink's operation

**4.149** We note that none of VocaLink's proposals for core services innovation have come to fruition yet, except for Bacs charity donations.

**4.150** An operator, three direct PSPs and VocaLink highlighted that VocaLink was also involved in other innovations within or around core services. The examples given included the initial design and build of FPS, LINK ATM charity donations service, and the development of CASS and Paym. The operator and two PSPs acknowledged that these developments were collaborative efforts (involving VocaLink, the operators and other parties) and that some may not have occurred without government pressure.

**4.151** One operator and two direct PSPs said that there are some innovations that exist in Europe but are not in the UK. However, they told us that some of these innovations are currently being considered by UK parties – by PSPs, operators, VocaLink and within the Forum. The innovations they referred to include:

- cloud-based flexible capacity, which allows processing and storage capacity to be scaled up and down depending on users' needs at certain times
- enhanced user interfaces for data management and queries that are more flexible and configurable to the needs of individual PSPs, or enable on-line self-service queries and analysis
- request to pay, where a corporate user sends a pack of transactions to its bank, which are then presented to the paying banks to trigger the payment cycle
- e-archiving, featuring a central archiving and retrieval functionality for storing transaction details and accompanying invoice details
- payment tracking (a facility for users to track and trace individual payments)

**4.152** One direct PSP said this indicates that innovation can be achieved without formal competitive procurement exercises. Another direct PSP questioned the benefits of competitive procurement in terms of innovation given that these innovations in other countries were produced without formal competitive procurement exercises. Similarly, a third direct PSP said that it is implausible that these European innovations are the result of competitive procurement of core infrastructure, given competitive reprocurement is rare. This direct PSP questioned whether increased competition could drive more innovation given the scope and level of service currently provided.

**4.153** A direct PSP said it would be unusual and inefficient for any business or sector to implement every example of innovation in the global industry.

### *Incentives to innovate*

**4.154** When asked, the operators and direct PSPs said long-term incentives to innovate in payment systems are centred on maintaining or increasing competitive advantage. This includes retaining or attracting customers and meeting their demands, responding to new growth opportunities, and reducing costs and prices. Other incentives were about improving resilience and security of payment systems, or meeting regulatory expectations.

**4.155** Three direct PSPs do not believe that innovation in the UK has been largely regulatory driven. The three PSPs told us the Lipis Report finds that innovations in the UK have been driven by both commercial and regulatory entities. Two of these added that the Lipis report indicates that regulatory involvement in innovation is a common feature of payment systems globally, but that the UK is unusual in having commercial operators and an active regulator driving new developments.

**4.156** Two direct PSPs noted that Paym and Zapp were commercially driven. One direct PSP said that FPS, CASS and Cash ISA were initiated by commercial parties or industry bodies. Another direct PSP said the Financial Services Trade Association Review (known as the 'Richards Report') indicated that a major bank approached the Government with a detailed proposal for cheque imaging which helped the Government to achieve its policy goal.[79]

**4.157** One direct PSP does not believe that, to the extent that there has been regulatory involvement, this has crowded out commercial innovation. Rather, it said that regulatory involvement in innovation is a natural feature of payment systems and that this is highlighted in the Lipis Report.

**4.158** Operators and direct PSPs had mixed views about whether VocaLink could innovate more in core services.

**4.159** One operator, two direct PSPs, and two downstream infrastructure providers believe VocaLink lacks an incentive to innovate more in core services. These stakeholders think this is due to a lack of competition for the provision of core services and the fact that more profit could be made on innovations in other commercial areas.

**4.160** Two operators and several direct PSPs think VocaLink's ability to innovate in core services is limited by the demands of its customers. Two operators and four direct PSPs noted that the operators ultimately determine what developments are carried out within core services, outside of general maintenance. Two of these direct PSPs think this prevents VocaLink, albeit necessarily, from making changes or innovating in core services beyond the demands of the operators. Two other direct PSPs think the operators' demand for investment in core services is related to resilience and operational efficiency rather than innovative developments. Meanwhile, seven direct PSPs do not demand significant innovation in the core services because they either see the provision of these as a standard utility-type service, or see additional innovation as unnecessary to their business strategy.

**4.161** Two direct PSPs said VocaLink's ability to innovate in core services may be limited because this innovation tends to require collaboration between several parties (VocaLink, the operators, PSPs and potentially other bodies). One of these said that because of this, it is not appropriate to criticise VocaLink for not independently innovating. This direct PSP added that VocaLink's innovations overseas were not solely due to its own actions, but rather reflected demands from authorities and payment system users in those countries.

**4.162** Another direct PSP believed VocaLink is undertaking developments that could help deliver competition and innovation benefits to end users.

**4.163** VocaLink considers it has achieved high innovation levels in core and non-core services notwithstanding the limited demand from customers. As noted in paragraph 4.78, VocaLink said that if the market structure changed to enable direct contracting between individual PSPs and

79 *Financial services trade associations review: Next steps* (July 2015), paragraph 2.3.9, page 26: http://media.wix.com/ugd/8fe067_59c83501d6b84d6989660cfab5164388.pdf

providers, PSPs would have greater demand for innovation to gain a competitive advantage over their competitors in the downstream retail banking market.

**4.164** Some stakeholders commented on operators' and PSPs' incentives to innovate.

**4.165** Two operators and two direct PSPs do not think that operators lack an incentive. As evidence of its drive to innovate, FPSL highlighted several projects it has worked on. These include Paym, automated scheme protection measures, scheme limit increase, settlement prefunding, Secure Hash Algorithm migration, the New Access Model (technical aggregation services) and work on 'Payment Request' (a request to pay service). One direct PSP commented that there is no evidence that operators restrict innovation. One direct PSP said operators place a high value on resilience but are also aware of innovation, and gave the example of the work around the FPS New Access Model.

**4.166** One direct PSP disagrees that PSPs are reluctant to innovate in core services and argues that PSPs can gain a competitive advantage for core innovations. As examples, the PSP noted that the introduction of FPS enabled it to develop its own version of Paym (Pingit) which not all PSPs offer, and that direct agency access to FPS is offered by a small number of PSPs. Another direct PSP noted that it competes in the retail banking market using innovation, such as Apple Pay.

**4.167** One direct PSP raised a concern about the funding mechanisms for collaborative developments in core infrastructure. It said that there is no clear and consistent process for how these costs are allocated amongst users and how disputes or appeals are handled and judged. It also noted that there is no clear funding mechanism for allocating costs of existing services. It said this can affect innovation outcomes.

**4.168** We asked stakeholders whether they felt VocaLink's provision of central infrastructure services might be hampering innovation.

**4.169** There were no concerns among operators, direct PSPs and infrastructure providers about VocaLink, and the core services it provides, hampering innovation or changes in payment infrastructure. An operator and a direct PSP noted that VocaLink has been proactive and helpful when operators have proposed concepts for developments in core services in the past, providing its expertise and knowledge to develop efficient, cost-effective solutions. Examples include the Secure Hash Algorithm update (to enhance security protocols) and enabling the new FPS technical access solutions to connect to the central infrastructure. Six direct PSPs noted that VocaLink has worked on non-core developments for them, citing the examples of mergers between PSPs and solutions to address banks' ring-fencing requirements.

**4.170** Downstream infrastructure providers (fintechs) told us that they do not think the central infrastructure inhibits innovation in other areas of the payments value chain.[80]

**4.171** Overall, most direct PSPs and operators consider VocaLink to be innovative. While there are mixed views about whether VocaLink could be more innovative in the core services, VocaLink is not seen to be blocking innovation in payment systems.

## Our assessment

**4.172** We acknowledge that the Lipis report finds that UK payment systems offer relatively rich functionality compared with most other countries' payment systems considered. However, there are innovations and developments being undertaken in payment systems in other countries. This is noted in the Lipis report that found that most of the countries have made, or are in the processing of making,

80 We do not consider here the issues related to access to payment systems.
These issues are considered in our Market Review into Supply of Indirect Access (July 2016):
https://www.psr.org.uk/psr-publications/market-reviews/MR1513-final-report-supply-of-indirect-access-payment-systems

significant changes to their payment systems.[81] A report by the Bank of Canada and Payments Canada also found that most of the 27 countries considered have upgraded their core payment systems to improve those systems' attributes and functionality.[82] As these findings indicate, there are different innovations occurring continuously over time. Therefore, it is important that the right incentives are in place to ensure that innovations best meet the current and ongoing needs of service-users (see paragraphs 4.1 to 4.3).

**4.173** While there has been some innovation in the core services, the major changes have been largely government driven, such as the creation of FPS, CASS and the FCM for cheque imaging (see paragraphs 3.70 and 3.86). As in the case with FPS, CASS was developed and launched by industry following the Independent Commission on Banking's recommendation for the introduction of a redirect service.[83] The Lipis report aligns with this view on innovation in UK payment systems – it attributes major innovations in the core services to regulatory intervention. The innovations that the Lipis report attributes to commercial interests are overlay or non-core services.[84]

**4.174** Regarding the stakeholder's concerns outlined in paragraph 4.157, we do not suggest that regulatory involvement in innovation crowds out commercially-driven innovation. Rather, it is likely there would have been a slower pace of innovation in the UK if there was no regulatory involvement.

**4.175** To further consider innovation in the core services, we reviewed information provided by the operators on proposed changes to the core services logged through VocaLink's change request procedures over the past five years to 2015. The majority (81%) of change requests were for minor enhancements to existing products and services. A small number (5% [✂]) related to new products and services or were a major enhancement to existing services, but half of these have not progressed. Two operators identified VocaLink as initiating [✂] of the change requests over that period, [✂] of which related to a new service, suggesting VocaLink was driving that innovation. VocaLink did not appear to block any of the change requests. However, we have evidence that VocaLink hampered innovation (the introduction of an ISO 20022 translation component) during the Bacs contract renegotiation process in 2014, as outlined in paragraph 6.111.

**4.176** The evidence noted in paragraph 4.175 and the examples provided in paragraphs 4.147 to 4.148 suggest that VocaLink has not independently driven much innovation in the core services, particularly when compared with its innovations in more competitive non-core services and outside the UK.

**4.177** However, we acknowledge that VocaLink is contractually limited in its ability to make changes to core services, as any changes require agreement from the operators. Outside of regulatory intervention, innovation in core services should be driven largely by the demands of the operators, as the current procurers on behalf of the direct PSPs. However, in the current market structure of collective procurement, the operators and direct PSPs do not have a strong incentive to innovate or shop around for more innovative services (as noted in paragraphs 4.80 to 4.85). We also find that common ownership between operators and infrastructure providers by some direct PSPs reinforces this inertia (see paragraphs 6.113 to 6.125).

**4.178** We acknowledge those examples of enhancements provided by FPSL in paragraph 4.165, although we note that most of these relate to enhancements to security, resilience and stability. The recent developments of a New Access Model and a request to pay functionality are encouraging.

81 Lipis Advisors, *Payment system ownership and access models: comparative analysis of 13 countries* (December 2015), page 16: https://www.psr.org.uk/psr-publications/market-reviews/MR1522-lipis-report

82 Bank of Canada and Payments Canada *'Clearing and Settlement Systems from around the World: A Qualitative Analysis'*, Payments Canada Discussion Paper No 5 June 2016, pp 7-8 and 18-32, available at: https://payments.ca/wp-content/uploads/2016/06/2016-Qualitative-Analysis_FINAL.pdf

83 Financial Conduct Authority, *Making current account switching easier: the effectiveness of the Current Account Switch Service (CASS) and evidence on account number portability*, (March 2015), paragraphs 3.14 to 3.17, available at: http://www.fca.org.uk/your-fca/documents/research/cass-report

84 Lipis Advisors, *Payment system ownership and access models: comparative analysis of 13 countries* (December 2015), page 12 and 14: https://www.psr.org.uk/psr-publications/market-reviews/MR1522-lipis-report

**4.179** As for those examples provided to evidence PSPs' incentive to innovate (paragraph 4.166), we do not dispute that the creation of FPS enabled PSPs to develop their Paym solutions, but we note that FPS was a government-driven innovation (see paragraphs 3.70 and 3.86). We also do not dispute that PSPs are willing to adopt innovation or develop their own, such as Apple Pay or Paym, where there is a competitive advantage for them to gain. However, we consider that it is not normally the case that PSPs can gain a competitive advantage through innovations in core infrastructure in the current market structure.

**4.180** We have previously acknowledged difficulties in collaborative innovation in the core services. In our 2014 consultation[85] we found that the UK payments industry lacked effective industry-wide strategy development, co-ordination and planning. This led us to establish a new process for industry strategy-setting through the industry-led Payments Strategy Forum. The Forum will help determine and drive strategic priorities and has now published its draft strategy.[86] The proposals in the Forum's draft strategy suggest that there is significant scope for further collaborative innovation that has not occurred to date under the current industry structure.

**4.181** The lack of competitive procurement or, at a minimum, sufficient market testing means that operators are not exposed to potential innovations in core services such as new services or enhancements of the current services. Such activity would expose the operators to alternative offerings and allow them to compare providers' offerings. Effective competition would give alternative providers the opportunity and incentive to offer new or enhanced services.

**4.182** The payments industry is continuously evolving, with technological advances (such as enhanced data processing and biometrics), new entrants along the value chain (such as fintechs) and other drivers of change that can affect future demand for payment services and for the central infrastructure underlying those services (see Annex 4). If those procuring infrastructure services do not, at a minimum, sufficiently test the market, they will not realise the potential use and benefits of these innovations in technology and services.

**4.183** It has also been highlighted in past reviews by government and other regulatory bodies that more could be done to encourage innovation in UK payment systems without the need for regulatory action to prompt this (see paragraphs 3.74 to 3.97). Given the evidence above, we consider that the issues around limited incentives to innovate still exist.

**4.184** VocaLink's incentive to anticipate potential innovative developments within core services to meet the future demands of PSPs will be dampened by the lack of competitive pressure. Over the last few years VocaLink has identified and proposed to the operators and direct PSPs some potential areas for innovation in core services, such as [✂] and point of sale transaction through LINK, but VocaLink has developed more innovations in non-core areas (see paragraph 4.148).

**4.185** VocaLink provided us with its recently developed vision for the future of the UK payments industry, which suggests that VocaLink is giving consideration to the potential for future innovation, and competition, in the UK payment systems. In its vision, VocaLink considers potential changes, such as the introduction of single access points for PSPs, a move to harmonised message standards, a change of VocaLink's ownership and a change in the role of operators. VocaLink also notes the benefits for innovation from greater competition through tendering.

**4.186** It is encouraging that UK participants are considering more advanced services that are offered in other payment systems but are currently not available in the UK. We spoke to some European infrastructure providers about those innovations outlined in paragraph 4.151, and they noted that they offer these in other payment systems outside the UK. The Forum's End-User Needs Working Group has identified some potential innovations in central infrastructure services in the UK that

85 PSR CP 14/1: *A new regulatory framework for payment systems in the UK* (November 2014) – pp. 4-27, available at https://www.psr.org.uk/psr-publications/consultations/consultation-paper-141

86 Payments Strategy Forum Launches Draft Strategy for Consultation (14 July 2016): https://www.paymentsforum.uk/history/payments-strategy-forum-launches-draft-strategy-consultation

would help address certain detriments for end users. These developments include confirmation of payee, enhanced data and request to pay.[87] These examples of potential innovations illustrate that there are innovative features that could potentially be added to UK payment systems for the benefits of users. We do not attempt to use these examples to analyse the general level of innovation in other countries compared with the UK, or suggest that all innovations elsewhere should be implemented in the UK.

**4.187** One PSP raised the issue of funding mechanisms for new developments and costs related to existing services (see paragraph 4.167). We note that the funding mechanisms used are based on a general principle of 'user pays'. We consider the industry, in the first instance, would be best placed to determine whether and what changes in the funding mechanisms should be made.

**4.188** Overall, there has been limited innovation in core services in the past, with major changes driven by regulatory intervention. This compares with the extent of innovation that has occurred in non-core services where the parties procuring (the PSPs) can gain a competitive advantage by seeking out innovative solutions. In the current market structure, incentives to innovate in core services are not strong. Effective competition would give those procuring central infrastructure services the opportunity to realise the potential use and benefits of innovations and technological developments.

## Potential competitors for core services

**4.189** To understand whether VocaLink is subject to competition and if there is potential for competition, we examined the scope for alternative providers to offer core services for Bacs, FPS and LINK.

**4.190** We asked operators and direct PSPs whether there was sufficient choice in providers of core services. They told us that they do not think there are many other providers that could compete against VocaLink to provide the Bacs, FPS and LINK core services. However, views about potential competitors differ between the three payment systems.

**4.191** **For Bacs:** BPSL and three direct PSPs noted that the Bacs central infrastructure services have rich functionality (the Bacs Direct Debit and Direct Credit services, Direct Corporate Access channel and the messaging and reporting services). They told us that other existing providers (such as those operating in SEPA) offer a leaner set of services and operated on different messaging standards to the proprietary Standard 18 messaging standard format used in Bacs. BPSL noted that the findings of the Lipis report support this view that other providers could not adequately provide the functionality-rich services in Bacs. The three PSPs believe that other providers may not be able to offer all the services required for Bacs. BPSL also told us that other providers are not actively trying to offer central infrastructure services for Bacs, while one direct PSP does not think other providers would be interested in Bacs because of the proprietary Standard 18 messaging standard format.

**4.192** **For FPS:** Seven direct PSPs did not think there were any credible alternative providers to VocaLink and, as for Bacs, none that are based in the UK and could provide the same quality of service and handle the transaction volumes. Three of these direct PSPs thought that the real-time functionality of FPS would be difficult for other providers to offer. In contrast, FPSL and one direct PSP commented that there are other international infrastructure providers that could potentially compete against VocaLink. FPSL added that the functionality of FPS's central infrastructure services is not particularly complex.

**4.193** **For LINK:** LSL and ten PSPs thought there were some potential competitors to provide LINK central infrastructure services, notably companies that provide infrastructure for card payment systems, given the similarities in the functionality. But half of these thought other providers may not be suitable because they have: incomplete functionality required for LINK central infrastructure services; conflict of interests in their business strategies; or no established connectivity with PSPs in LINK, so PSPs

87 Payments Strategy Forum, *End User Needs Group Report Update* (3 June 2016): https://www.paymentsforum.uk/sites/default/files/documents/PSF09062016%20-%20%284a%29%20End-User%20Needs%20WG%20Report.pdf

would be required to migrate their connectivity to a new provider which involves costs and risks (see paragraphs 4.212 to 4.214).

**4.194** One direct PSP said that the UK market for infrastructure services is unlikely to be attractive to alternative providers, given the relatively small market size and lack of internationally common technical standards (see paragraphs 4.254 to 4.290).

**4.195** Another direct PSP said that expressions of interest by alternative providers – unlike formal bids in a tender – are not credible indications that a provider could offer the appropriate services. It said that the details of a provider's capabilities, capacity and compatibility (and at what cost these were acquired) to deliver the required services needed to be considered before a provider could be considered as a credible competitor. It added that stakeholders' views explaining how there are no credible alternative providers to VocaLink should not be dismissed.

**4.196** When asked, ten direct PSPs noted that greater competition for the provision of infrastructure services, in general, could lead to better value for money, lower costs, enhanced quality of service and more innovation. They added that this should not be to the detriment of resilience or the security of payment systems.

**4.197** We asked a number of domestic and non-domestic infrastructure providers if they would consider competing against VocaLink for the Bacs, FPS and/or LINK core services. Several central infrastructure providers we spoke to expressed an interest in competing for certain payment systems, and three believed that they could do it at a competitive price. For each payment system, the number of providers that said they would be interested in competing was:

- Bacs – seven providers
- FPS – seven providers
- LINK – five providers

**4.198** These prospective providers said that they already have some of the capabilities and functionality necessary (including real-time functionality), and would also be willing to develop the additional capabilities needed to meet the specific functional and technical requirements. Four of these providers could not say with certainty what functionality they would need to develop without first knowing the detailed technical specifications of the payment systems. Two providers told us that they could offer the full service required for FPS and LINK, respectively. One of these said it had participated in the initial build-and-run FPS tender process in 2005. Five providers said they could handle the volumes of the UK payment systems; four of these said that they had scalable capacity that enables them to do so.

**4.199** Two providers said that they are less interested in offering bespoke services as they would want to take advantage of potential economies of scale. Another provider said it was not currently interested in providing core services for LINK, but that it does provide similar services elsewhere and it might be interested if it knew more about the specific requirements.

**4.200** Some providers we spoke with that offer downstream services, including gateway solutions and payment initiation solutions, are not interested in providing core services, which are not their main business focus and speciality.

**4.201** Central infrastructure providers identified some barriers to entry and expansion in the market for the provision of services for Bacs, FPS and LINK, such as the lack of competitive procurements and the perceived 'closed shop', given the cross-ownership between the operators and VocaLink. These and other potential barriers to entry are discussed in paragraphs 4.245 to 4.304. The providers told us they do not know the detailed requirements of the operators or have an avenue to showcase their potential offerings.

**4.202** In summary, most operators and PSPs perceive there to be limited alternative providers to VocaLink for Bacs, FPS and LINK, based on their current set of requirements. However, we have identified several potential providers interested in competing to provide these services, though factors including the lack of competitive procurement exercises and awareness of technical specifications have prevented them from competing.

## Our assessment

**4.203** Given the lack of competitive procurement processes and even sufficient market testing, potential providers do not appear to have much opportunity to demonstrate their capabilities and potential offerings to the operators (as the current procurers) and, in turn, the PSPs. This may reinforce the operators and PSPs' perceptions that there are no credible alternative providers.

**4.204** Nor do potential providers appear to have much clarity around the functionalities they could potentially offer relative to what is required, and for what price, and how the costs and risks involved with switching could be addressed (as such information is generally made available during competitive procurement exercises). Therefore it is difficult for them and operators to evaluate what additional capabilities and capacity they would need to provide the central infrastructure services for Bacs, FPS and LINK. While the Lipis report finds that UK payment systems are relatively rich in functionality compared with other payment systems, this does not necessarily mean that other providers would not be able to provide these services.

**4.205** The market for the provision of central infrastructure services is a global one. VocaLink already operates in other jurisdictions, such as Sweden. Other infrastructure providers such as Equens are also active in several countries. There is also evidence to suggest there are other potential providers that could be interested in competing against VocaLink:

- Our review of potential providers that offer similar infrastructure services for domestic interbank payment systems in other countries suggests there are at least ten who could potentially compete for UK core services (see paragraph 3.46). Several of these providers told us they are interested in competing.
- There could be additional providers that could compete against VocaLink for the LINK core services beyond those four providers shortlisted in the RFI process (as noted in paragraphs 4.52 and 4.55).
- There have been a number of providers that registered interest in participating in domestic and international tenders such as the tenders for FCM, Cash ISA, and Singapore's and Australia's immediate payments solution. Some of the providers that participated told us they are interested in competing for Bacs, FPS and LINK.
- Providers generally seem to be interested in expanding their business. For example, Visa Europe stated in its latest investors report that it is looking to innovate and differentiate its product and service offerings.[88]

**4.206** Our review of information provided by VocaLink shows that it is aware of the potential competitive threat of other providers, and suggests that it has been, and should be, willing to respond to potential competitive pressure. For example, internal documents show VocaLink noted the risk of losing the Bacs and FPS contracts when they were due for renewal in 2015 and responded to this threat. VocaLink also responded to the pressure exerted through the LINK RFI process (see paragraph 4.38 and 4.56). Internal documents also showed that VocaLink has previously considered the risk of potential competition if there was greater interoperability in UK payment systems in the future. VocaLink's response was to invest in developing its own capabilities to handle more flexible and interoperable standards (see paragraph 4.271). More recently, VocaLink's vision for the future of UK

88 Visa Inc. *'Transcript of Visa, Inc. Q4 2015 Earnings Call'* (2 November 2015) – p 12: http://investor.visa.com/events-calendar/Event-Details/2015/Visa-Inc-to-acquire-Visa-Europe/default.aspx

payment systems outlines how VocaLink, and the industry, might respond to potential developments in the UK payment systems (including greater interoperability).

**4.207** Overall, the lack of competitive procurement or even sufficient market-testing exercises appears to be reinforcing the operators' and direct PSPs' perception that there are no alternatives to VocaLink. However, there are a number of alternative providers willing to compete against VocaLink.

## Barriers to switching infrastructure provider

**4.208** Customers can drive effective competition by comparing different firms' products and services, and switching to those that best suit their needs. We consider whether there are barriers to switching infrastructure provider that may inhibit effective competition.

**4.209** We considered the potential barriers, including:

- the potential costs and risks of changing PSPs' systems to switch provider
- other potential barriers related to intellectual property rights (IPR) and other contractual provisions

**4.210** Each of these considerations is outlined below.

### Potential cost and risks of changing PSPs' systems

**4.211** The operators, many direct PSPs and four infrastructure providers believed that there were significant costs and risks associated with switching central infrastructure provider. They told us that the costs for PSPs that have direct technical connectivity to switch to a like-for-like provider relate to testing their technical connectivity to the new central infrastructure. They believed these costs could include the parallel running of the two central infrastructures for some period of time to ensure the migration of PSPs' connections and processes to the new central infrastructure are working properly, which would involve careful planning. As an example of the potential costs involved, one direct PSP gave the example of costs associated with the introduction of CASS. It said that 10% of the costs related to building the central infrastructure and the remaining costs related to changes to PSPs' internal systems.

**4.212** Operators, six direct PSPs and an infrastructure provider identified two main risks. One risk is disruption to central services during the migration (adversely affecting payment services to PSPs' customers). The other risk is that the new provider's service turns out to be lower quality than VocaLink's.

**4.213** Two operators, one direct PSP and two infrastructure providers noted that the difficulties involved with migrating PSPs to a new provider differ depending on the payment system:

- **For FPS and LINK** some of these believed it would be very complex for direct PSPs to switch to different providers because these systems are running 24/7 and have high transaction volumes. However, one noted this would be less of an issue in LINK for those providers with established connectivity to PSPs.[89] One said it is likely the PSPs would need to build a separate technical connectivity to the new provider to test and run in parallel for a long time because it felt it would not be possible to change the connectivity in a system with no downtime.

89 In LINK, most PSPs have established technical connectivity to MasterCard and/or Visa, which reduces the cost and risks of switching to either of these companies if they were to replace VocaLink as central infrastructure provider.

- **For Bacs** they perceived that the very large number of service-users – PSPs and corporate users – that directly connect into the central infrastructure and the rich functionality of Bacs would complicate the migration.

**4.214** Operators, ten direct PSPs and an infrastructure provider believed that there would need to be a good business case for switching infrastructure providers given the potentially high costs and risks involved. One operator said that a price discount offered by other providers would not be sufficient to outweigh the perceived costs and risks of switching provider. One direct PSP said it considered switching its infrastructure provider for the C&C payment system, but the migration costs were higher than the cost savings it would achieve.

**4.215** Two operators, ten direct PSPs and an infrastructure provider also questioned the rationale for switching away from VocaLink, given that VocaLink has provided a high quality of service to date and have knowledge and experience in running the central infrastructure. Two direct PSPs noted that the willingness of direct PSPs to switch providers would be influenced by the other IT projects or initiatives of the PSP (which may be of a higher priority) that may leave limited resources to carry out the migration.

**4.216** Two direct PSPs and two infrastructure providers said they thought that migrating to a like-for-like service would be relatively straightforward for them, involving a change in the IP address of the physical connection. One operator noted this as well, but said the difficultly would vary depending on the complexity of each PSPs' internal systems. The operator told us the difficulty with changing PSPs' connectivity related to the internal governance processes of PSPs, particularly the large banks. It said that their internal governance processes to sign off any IT changes take significant time and are costly (regardless of the extent of the IT change). It said this process is complicated further given PSPs often have a pipeline of other, possibly more essential, changes they are looking to make.

**4.217** Around ten direct PSPs (including the two PSPs noted in paragraph 4.216) said that the costs and risks of migration would be greater if the technical specifications for, and interfaces with, the new central infrastructure had to change. This is because it would have a larger impact on what PSPs need to change in their internal systems.

**4.218** Some stakeholders provided mixed views on the possibility of migrating PSPs to other infrastructure services:

- One operator said that a large-scale migration of a 24/7 running payment system has never been done before, and added that the Lipis report highlights that a migration of a legacy payment system has never been done before.

- One direct PSP acknowledged that in the transition to the SEPA euro clearing system, there was migration of PSPs' transaction volumes between infrastructure providers. This involved numerous PSPs migrating payment volumes to a new SEPA-compliant alternative provider (for example, Belgian banks migrated to a new proposition for which STET is the provider, while some banks in Germany and Italy migrated from their national providers to a pan-European provider such as EBA Clearing).[90] However, the direct PSP said that this event differed to what would be the circumstances of a migration to a new provider in the UK. It said that the migration occurred because there was structural change to the market and was a relatively more straightforward migration as the service offering is less rich than in the UK. It added that the decision to migrate related to individual procurement decisions by PSPs, rather than on a collective basis.

- One international infrastructure provider noted that a large-scale migration of PSPs to a different infrastructure provider is manageable with solid project management and support processes in place. This infrastructure provider had successfully carried out a large-scale migration of a payment system with 24/7 connectivity.

90 Lipis Advisors *'Payment system ownership and access models: comparative analysis of 13 countries'* (December 2015), page 29: https://www.psr.org.uk/psr-publications/market-reviews/MR1522-lipis-report

**4.219** Six stakeholders noted the potential for reducing some of the costs and/or risks involved with changing provider:

- Three direct PSPs noted that a phased migration process could help reduce the risks involved.
- One operator said that if PSPs review and make arrangements for their internal governance processes and technological capabilities ahead of any competitive procurement exercise, the PSPs would be in a better place to handle a switch in provider. It also suggested that a centralised access utility that acts as an intermediary between PSPs and the central infrastructure provider could help, as only the utility would need to make changes when switching provider.
- VocaLink told us that message translation software can be used to reduce the switching costs, in particular those incurred by PSPs to change their internal systems to enable a change in provider. The use of message translation services allows PSPs to use their current internal systems to interact with providers operating on different standards. This would mean that a 'big bang' migration (where all PSPs needed to implement internal changes at the same time) would not be needed. VocaLink said that its PayPort solution has message translation functionality.

**4.220** One operator said that a competitive procurement exercise might provide some insight into the possible transition approaches and costs from the provider's perspective. However, it said the broader transition approach and costs – such as for PSPs and other users that would need to make changes to their internal systems – would have to be developed in coordination with all PSPs and the operator.

**4.221** In summary, most stakeholders believed that there were significant costs and risks associated with switching central infrastructure provider. Some stakeholders noted the potential for reducing some of the costs and risks involved.

## Our assessment

**4.222** We recognise the potential costs and risks associated with changing PSPs' internal systems to connect to a new central infrastructure provider. Some switching costs, however, will relate to IT infrastructure which is likely to have relatively short asset lives. It is also important that the business case considers the financial and non-financial benefits (including dynamic benefits) from switching providers. These benefits could result, for example, from the latest technological advancements such as improvements in security and fraud prevention, or from more sophisticated message standards introducing additional functionality within payment systems, resulting in improvements to banking services.

**4.223** We requested from direct PSPs high-level estimates for the cost of changing their internal IT systems to support a switch of central infrastructure provider for Bacs, FPS and LINK. Most direct PSPs we spoke to were not able to provide this, as they said it is difficult to estimate these costs without knowing the specific scenario and assumptions, and running a full business case study. Four larger direct PSPs gave high-level estimates ranging from £5 million to £15 million for a switch to a like-for-like service from a different provider. Another large PSP estimated that a switch that would only require testing of the new connection, with no changes to a PSP's internal systems, which would cost around £0.3 million to £0.5 million.

**4.224** We acknowledge that a migration between providers in the current market structure requires a coordinated effort between the parties involved (including the PSPs and other users' that would have to make changes to their internal systems). We note that in this structure with collective procurement, incentives to switch provider may be more limited than in a structure where PSPs contract directly with providers.

**4.225** With regards to the migration of PSPs during the transition to SEPA (see paragraph 4.218), while this was driven by external factors, it still demonstrates that it is possible for PSPs to make changes to their internal systems and migrate their transaction volumes between different providers.

**4.226** We also note the potential for using middleware infrastructure – such as message translation software – for an interim period to reduce the costs of switching providers. The new FPS technical access solutions have been developed in this way (see paragraph 5.16). The PSPs could use message translation services for a period to avoid having to make immediate changes to their internal systems. They could then implement the transition at a suitable time – for example, when they next refresh their internal systems. There may be costs and risks involved in introducing message translation software, but these costs and risks should not be significantly different to those related to switching gateway providers, which PSPs have been willing to do (see paragraph 5.35).

**4.227** The risks involved with switching providers could also be mitigated with proper planning and testing. Also, contract provisions (termination and exit provisions) that ensure an incumbent provider is obliged to assist in the migration to another provider can make a migration smoother (these are discussed in paragraphs 4.230 to 4.244).

**4.228** Furthermore, as discussed in paragraphs 5.31 to 5.37, direct PSPs are concerned about the risk of service disruption when switching gateway providers, but several were still willing to switch because there was an overall benefit.

**4.229** Overall, we consider that it is difficult for the PSPs and operators to anticipate what costs and risks would be involved in changing PSPs' systems to enable the switch of provider, without running a competitive procurement process or, at a minimum, market testing.[91] These processes would enable them to better understand what the circumstances of a potential migration might involve and, in turn, the costs and benefits of switching providers.

## Other barriers

### *LINK*

**4.230** In 2016 LINK completed a number of changes to its governance and operational structure to become legally independent from VocaLink (see Annex 3).

**4.231** In light of the current contractual arrangements, LSL identified a number of barriers to switching related to the allocation of IPR. LSL noted that VocaLink owns the IPR of the LINK brand and the LIS5 message standard used in LINK. It said this is an added complication should LSL and its members switch provider, because changing the brand and message standard is costly. LSL confirmed that it can obtain a license to use LIS5 free of charge during the lifetime of the contract with VocaLink. However, if LSL were to switch infrastructure provider, and that provider still wanted to retain the use of LIS5, it would be required to pay VocaLink a license fee for every year of [✂]% of the revenues of the last year of the contract – which is approximately £[✂] a year. [✂].

**4.232** LSL commissioned an independent review from [✂] of the new contractual arrangements. While [✂] acknowledged that LSL successfully negotiated important concessions from VocaLink, they noted that three areas of the contract are not in line with market practices:

- [✂]
- [✂]
- [✂]

**4.233** Consultation responses to our interim report provided stakeholders' feedback on the separation between Link Scheme and VocaLink. The majority of respondents considered the separation process completed (or close to completion). One PSP and one operator specified that the new contract legally separates Link Scheme and VocaLink, and contains provisions on termination, exit rights and IPR allocation which

91 As noted in paragraph 4.54, in the LINK RFI, the costs and risks of switching were given high-level consideration.

would allow for future switching to another infrastructure provider. They also considered that the new governance arrangements fully adopt the recommendation of the independent governance review. One infrastructure provider argued that, although the current separation process addresses some of the identified issues, there are further opportunities to remove barriers to competition in the market for infrastructure services. For example, it suggested that LSL's contractual terms could be revised to allow individual PSPs to contract directly with alternative infrastructure providers.

**4.234** Some consultation responses raised issues we consider outside the scope of this market review. Two stakeholders raised general concerns on potential issues in the new contract between LSL, Network Members and VocaLink. One IAD noted that LSL cannot contract in its own right due to its lack of financial resources, hence the contract is stipulated between VocaLink, LSL and Network Members. Furthermore, the stakeholder remarked that joint liability provisions contained in the new contract may make it difficult for members to change schemes, leading to barriers to exit the scheme. For another stakeholder the separation between Link Scheme and VocaLink does not address access needs nor the competitive choice of provider by vulnerable individuals, small businesses and third sector organisations. The stakeholder argues that measures should be put in place to progress LSL's work on shared branching.

**4.235** Overall, most respondents broadly agreed that the restructure of Link Scheme and the current contracts for core services and governance arrangements mean that there are no barriers to switching infrastructure provider.

### *Bacs and FPS*

**4.236** BPSL and FPSL do not believe that they would be restricted in switching to a new provider due to the allocation of IPR. Both operators own the IPR for the functional specifications of the core services. BPSL said it had negotiated into its current contract the rights to transfer in some IPR from VocaLink, which it believes should make switching to another provider easier. This includes the IPR for the functional specifications and a licence to use the [✂]. It also negotiated a provision that VocaLink must negotiate a fair price for other IPR when the contract is terminated. However, in Bacs, VocaLink owns the IPR associated with the technical specification and source code for the core services. VocaLink has informed us that the software for the FPS central infrastructure is provided by FIS. FPSL told us that it is not concerned about this because it is common with managed services contracts that a provider owns the IPR of the source code. It said it is more important that FPSL owns the IPR of the functional specification because other providers should be able to build or acquire the required infrastructure relatively easily. For both FPS and Bacs contracts, VocaLink is contractually obliged to hold the up-to-date source code for the payment system in escrow. One operator told us that its exit plan provisions give the operator (or its new infrastructure provider) the opportunity to purchase some of VocaLink's assets associated with the core services for that payment system, such as the [✂].

**4.237** Both BPSL and FPSL think that their existing contracts' termination and exit plan provisions are sufficient to enable a switch to a new provider. These provisions require VocaLink and the operator to agree a detailed exit plan (by a certain date and/or after notice of termination) about how the migration to another provider would work. The provisions also outline the framework for what these detailed exit plans should cover, such as VocaLink providing assistance, staff and other resources during the switching process.

**4.238** The operators noted that it is difficult to determine the details of an exit plan in advance as the precise nature of the exit and migration requirements would depend on the circumstances at the time of termination. One operator noted that termination and exit provisions in the contract are as complete as could be expected prior to planning the actual transition. It noted that issues around covering every detail of an exit in advance are common to contracts of this nature. The same operator said that an incumbent provider that was not successful in winning the next contract would be likely to have an incentive to cooperate in the exit and transition process. This is because any measures to frustrate the process would damage the provider's reputation and likelihood of winning future contracts. The other operator noted that negotiating a detailed exit plan takes some time.

## Our assessment

**4.239** In our assessment, LSL's new contract for core services does not appear to present a high barrier to switching. LSL became legally separated from VocaLink from 1 April 2016.

**4.240** We note that in the contract for core infrastructure services between VocaLink, LSL and Network Members, VocaLink retains ownership of the LIS5 standard intellectual property and the LINK brand. We considered related impacts on competition. [✂]. This may prevent some innovation from happening. However, we conclude that VocaLink's ownership of IPRs over the LIS5 standard and the LINK brand does not constitute a high barrier to organising a competitive procurement or switching provider. This is for two reasons:

- Firstly, the cost (to pay every year [✂]% of the revenues of the previous year of the contract, around £[✂] a year, in license fees to VocaLink to keep using IPRs over message standards) that a new provider would incur to use the LIS5 standard does not appear to be significant when compared with other relevant costs and fees. We note that VocaLink's costs for providing the LINK service is around £[✂] a year.

- Secondly, LSL obtained the ability to continue using the LINK brand after the termination of the contract with VocaLink. LSL obtained a perpetual license free of charge from VocaLink to continue using the LINK brand. The brand can be further sub-licensed to alternative infrastructure providers free of charge. [✂].

**4.241** We note that LSL, BPSL and FPSL's exit plan provisions provide some detail around what these detailed exit plans should cover. We also agree that certain specific details may not be determined without knowing the circumstances of the exit. The desire of one operator to agree a detailed exit plan before giving notice of termination suggests that it may not be satisfied with the level of detail covered in its other exit provisions. We also note that the date for agreement of the detailed exit plan has passed and that the operator said it plans to work on the detailed exit plan in the coming year.

**4.242** If detailed exit plans are not agreed (in so far as is possible) in advance of termination, it could be difficult to negotiate these with an unsuccessful provider. Even though the contracts have clauses that require VocaLink to negotiate reasonably in determining the exit plans, it may still be possible for VocaLink to delay or frustrate these negotiations if it wanted. We note that such actions would damage the provider's reputation and likelihood of winning future contracts. This reputational risk would incentivise an incumbent provider to cooperate.

**4.243** Overall, we note that Link Scheme Limited and VocaLink are now legally separate. Furthermore, we consider that LSL's new contract for core services does not present a high barrier to switching infrastructure provider.

**4.244** For the Bacs and FPS contracts, based on the evidence seen, it is unclear whether the existing provisions in each contract and the IPR and termination provisions are sufficient to enable a switch in provider which may dampen the competitive pressure on VocaLink. Similarly, without detailed exit plans having been drafted for Bacs, FPS and LSL contracts, it is not possible to properly assess whether these create barriers to switching to an alternative infrastructure supplier.

## Barriers to entry

**4.245** If other firms face difficulties in entering and competing in a market, the incumbent firms do not face the threat of new entry and so may have little incentive to provide competitive prices and services. We assess whether there are barriers to entry inhibiting effective competition in the context of providing infrastructure services for Bacs, FPS and LINK.

**4.246** Prospective providers identified several potential barriers, including:

- the lack of competitive procurements
- the ownership arrangements between VocaLink, the operators and some PSPs
- the messaging standards used
- the location of data centres
- the bundled set of core services that must be provided

**4.247** Each of these barriers is outlined below.

## Lack of competitive procurements

**4.248** Several providers said they are interested in providing the core services for the Bacs, FPS and/or LINK payment systems, but they have not been invited to submit proposals outside of the original build and run tender for FPS and the recent LINK RFI process. None of the providers who gave evidence in this review had directly approached the operators about providing the core services, outside of the above invitations. The operators said that they have never been approached by potential providers except on one recent occasion in late 2015. One operator added that providers have the opportunity to approach them at international forums or events.

**4.249** However, one provider explained that it had not approached the operators because it was not in its interest to do so. The provider perceived the provision of core services in the UK interbank payments systems as a closed market, given the lack of open tenders, and that the operators had no appetite to switch providers. Two providers stated that it was difficult to know with certainty what services it could provide for a payment system without knowing more details about the technical specifications and requirements that are provided in procurement exercises.

## Our assessment

**4.250** As noted in paragraph 4.50, there has been a lack of competitive procurement exercises to re-procure for core services. Without competitive procurement exercises – and the information typically provided in these exercises (such as technical requirements and functional specifications) – other providers cannot determine with certainty if and how they can provide these services (see paragraphs 4.204 and 4.229). We would not expect other providers to have adequate incentives to independently approach the operators, as the current procurers, to offer their services if they consider it a closed market.

**4.251** There is evidence to suggest that there is a high likelihood of potential providers competing in a tender. As noted in paragraphs 4.197 and 4.205, there appear to be a number of providers globally that could compete, including those providers that told us they are interested. Also, VocaLink's profitability on the provision of core services suggests other providers should have an incentive to enter a procurement exercise (see paragraph 4.96).

**4.252** Overall, we conclude that the lack of competitive procurement exercises is a barrier to entry that prevents potential providers from competing in the market for provision of Bacs, FPS and LINK core services.

## Ownership arrangements

**4.253** We conclude that the common ownership of the operator and the infrastructure provider by some direct PSPs discourages potential providers from entering the market for the provision of core services. We consider this barrier in detail in paragraphs 6.167 to 6.187.

## Messaging standards and interoperability

**4.254** Another barrier noted by providers is the bespoke messaging standards that UK payment systems use. This is one aspect of a wider issue concerning interoperability.

**4.255** Interoperability is the ability of different systems to work together. In the payments industry – depending on context – it can be used to refer to the ability of:

a. participants in a payment system (for example PSPs, corporates and government bodies) to work together

b. different central infrastructure providers to work with each other (typically where multiple central infrastructure providers operate within the same payment system)

c. participants in payment systems to work with an infrastructure provider or several different providers)

d. different payment systems working together, or

e. all, or any combination, of the above

without significant and undue effort.

**4.256** Messaging standards are a key determinant of interoperability. However, other technical standards, operating rules and business processes affect the level of interoperability. For example, standardisation and harmonisation of processing flows, operational procedures and exception handling, synchronisation of routing tables, processing cycles, and settlement phases and cycles can help create a more interoperable environment.[92] This can enhance competition at different levels of the value chain – including central infrastructure services – and more interoperability across payment systems. Interoperability across payment systems in turn can improve systemic resilience as the impact of a failure of any individual system would be lessened.

**4.257** Low interoperability can inhibit competition and systemic resilience. It could also inhibit the transition to alternative industry structures and procurement models, such as competition **in** the market with multiple providers (see Annex 5). We recognise that different industry structures and procurement models are possible in the future.

**4.258** In the UK, standardisation and harmonisation of the various elements that affect the level of interoperability, as set out at paragraph 4.256 above, requires changes in existing rulebooks and could even imply the consolidation of existing payment systems. This represents a substantial re-shaping of the current industry arrangements. We consider that such a strategic change for payments in the UK goes beyond the scope of this market review.

**4.259** We note that there is other work ongoing in relation to improving interoperability. On 13 July 2016 the Forum published its draft strategy and consultation paper setting out proposals aimed at meeting the changing needs of UK payment systems' end users.[93] We note that amongst other proposals the Forum proposed to consolidate the operators of three UK payment systems – including BPSL and FPSL – into a single operator with a long term objective to integrate the respective rulebooks. One objective of this proposal was to deliver increased interoperability, which should increase systemic resilience and potentially enhance competition in the downstream retail market.[94]

92 London Economics, *Competition and collaboration in UK payment systems* (October 2014), page 22: http://www.fca.org.uk/static/documents/psr/london-economics-report-on-competition-and-collaboration-for-the-psr.pdf

93 Payments Strategy Forum, *Being responsive to user needs – A draft strategy for consultation*(July 2016), page 5: https://edit.paymentsforum.uk/sites/default/files/documents/Being%20Responsive%20To%20User%20Needs%20-%20Draft%20Strategy%20For%20Consultation.pdf

94 Payments Strategy Forum, *Being responsive to user needs – A draft strategy for consultation*(July 2016), page 71.

**4.260** In this section of the report we consider interoperability with respect to point c in paragraph 4.255 – we consider the ability of participants in payment systems to work with different infrastructure providers without significant and undue effort. In particular, this section focuses on the messaging standards currently used by Bacs, FPS and LINK.

**4.261** The Bacs system uses its proprietary Standard 18 messaging standard. FPS uses its own implementation of the ISO 8583 standard (commonly used in global card systems). FPS also uses the Standard 18 messaging standard for Direct Corporate Access. LINK uses its LIS5 standard, which is an implementation of the ISO 8583 standard. These are bespoke standards or implementations not used by providers other than the incumbent provider.

**4.262** We consider whether these messaging standards represent a barrier to entry. This could be the case where the adoption of a bespoke messaging standard by a central infrastructure provider requires the development of a new internal system, making it more costly to compete to provide central infrastructure services to Bacs, FPS and/or LINK. In contrast, where a common international standard is used, this may reduce barriers to entry if alternative providers may be able to provide central infrastructure services using their existing systems.

**4.263** A variety of stakeholders including infrastructure providers, PSPs and trade bodies mentioned that more interoperability and in particular the adoption of common international messaging standards would deliver benefits related to competition and innovation.

**4.264** Five PSPs noted that the UK payment infrastructures are currently characterised by a low level of interoperability. They explained that this hinders competition at various levels, including central infrastructure services. They considered that a move to common international messaging standards would be a first significant step to address this issue.

**4.265** Another eight stakeholders, including technical infrastructure providers, IADs and trade bodies, were of the opinion that adoption of common international messaging standards would enhance interoperability. These and other stakeholders explained that this would also lead to more competition and innovation for central infrastructure services.

### *Bacs and FPS*

**4.266** For the Bacs and FPS systems, five alternative central infrastructure providers said that the harmonisation of messaging standards to those used internationally (in particular ISO 20022) would encourage more competition from international providers. They would have more opportunities to effectively compete against the incumbent provider. This is because they already use this standard to provide central infrastructure services in other countries.

**4.267** One of these providers explained that if the UK payment systems adopted commonly used messaging standards such as ISO 20022, this would drastically reduce the significant investment necessary for them to be able to provide services in the UK. This would raise the provider’s likelihood of participation and potentially lead to more competitive bids.

**4.268** Two providers explained that they would not be interested in competing for UK interbank payment systems without the adoption of alternative messaging standards. One of these specified that it would not consider offering central infrastructure services unless IS0 20022 was adopted.

**4.269** One alternative provider explained that its likelihood of participating in a competitive procurement is independent of the messaging standard used.

**4.270** VocaLink observed that current SEPA infrastructure providers do not have systems that would work using legacy UK messaging standards and rules. To compete for the UK systems contracts, these providers would need to develop new systems. VocaLink noted that the cost of such development acts as a barrier to entry for SEPA providers. In corporate strategy documents VocaLink noted that UK standards afford it protection from potential competitors and that moving to ISO 20022 would level the playing field.

**4.271** VocaLink's internal documents from 2013 show that the company was aware that existing standards afforded protection to VocaLink as the unique supplier of payment services using UK-specific standards. The same documents show that if the introduction of ISO 20022 standards were made mandatory, then it would put VocaLink at a significant disadvantage to competitors who already had ISO 20022 capabilities. To that end, the company identified the development of ISO 20022 capability as a priority to enable VocaLink to retain the contracts for central infrastructure services.

**4.272** However, in response to our interim report, three stakeholders claimed that UK messaging standards do not represent a barrier to entry considering that translation software could be used to convert UK standards into other commonly used standards and vice versa. At the time of our interim report, BPSL had commenced a mapping exercise between Bacs Standard 18 payment messages and ISO 20022. BPSL is yet to complete this exercise. Similarly, FPSL completed the mapping exercise between ISO 8583 and ISO 20022 only after the publication of our interim report.

**4.273** One of these stakeholders, FPSL, explained that the fact that FPS is based on ISO 8583 does not represent a barrier to entry for alternative central infrastructure services providers. This is because ISO 8583 is the most common international payments standard used globally (by virtue of its use in global card systems).

**4.274** In response to our interim report, VISA Europe mentioned that the evidence we provided did not show that existing messaging standards are deterring potential providers from entering the market. This is because the interim report highlighted that at the time only one provider reported that they were not interested in competing for UK interbank payment systems unless the ISO 20022 standard was adopted.

***LINK***

**4.275** Three alternative infrastructure providers said they would be more likely to participate in a competitive procurement to provide ATM switching services for LINK if the system adopted a common international messaging standard.

**4.276** One alternative provider explained that its willingness to participate in a competitive procurement for LINK is independent of the messaging standard used.

**4.277** However, we have evidence showing that it would require costly changes to their own internal infrastructures for the LINK members to adopt different messaging standards or different implementations of ISO 8583. For example, [✂].

**4.278** We also have evidence showing that it would require effort of alternative infrastructure providers to adopt the LINK implementation of ISO 8583. For example, [✂].

**4.279** Four stakeholders, including operators, PSPs and a trade body – noted that ISO 8583 messaging standards are acknowledged global standards for card activity. Two of these explained that this already provides some level of interoperability for the LINK system. As a consequence, a shift to a different messaging standard could reduce existing interoperability and hinder competition rather than stimulating it. One of these stakeholders explained that a migration to ISO 20022 for LINK should only be predicated on a shift in the cards and ATM sectors towards the standard so the UK is in line with international trends.

**4.280** LSL did not think that the lack of a common messaging standard is the main issue preventing competition for LINK core infrastructure services; rather, it is due to the issue with changing connectivity to another provider (see paragraphs 4.211 to 4.229).

**4.281** LSL also explained that mandating a move of LINK to a different standard could cause LINK to become less attractive to its members compared with VISA and MasterCard. The vast majority of LINK members already have an established connection with VISA's and/or MasterCard's core infrastructures and may prefer to move to one of them rather than incur costs to support LINK's adoption of a new standard.

## Our assessment

### *Bacs and FPS*

**4.282** Bacs, FPS and LINK use bespoke UK messaging standards, or implementations of an international standard, which are not used in other systems. We find that a number of providers were interested in competing for the provision of central infrastructure services for the Bacs and FPS systems. However, the current low level of interoperability – partly due to the legacy UK messaging standards – makes it more difficult for them to put forward competitive bids and have a realistic opportunity against the incumbent provider. Any potential alternative provider would need to develop new capability to use the bespoke messaging standards (or adopt translation services – see paragraph 4.270. Adoption of bespoke standards – including the messaging standards – would require alternative providers to pay substantial development costs that are not incurred by the incumbent provider. Feedback from stakeholders shows that the current low level of interoperability due to bespoke UK messaging standards makes it more difficult for alternative providers to bid to provide infrastructure services to Bacs and FPS.

**4.283** The incumbent provider – VocaLink – recognised that the costs that alternative infrastructure providers (especially those already operating in SEPA) would need to incur to adopt legacy UK messaging standards represent a barrier to entry for them. As a consequence UK standards afford VocaLink protection from potential competitors.

**4.284** We acknowledge that ISO 8583 – the standard used for core FPS services – is a messaging standard globally used in the payments industry. However, we note that it is different implementations of this standard which are commonly used for card services. We also note that this standard is not commonly used for direct credit services (nor they are used for direct debit services). This means that many alternative providers interested in providing payment infrastructure for services similar to FPS would still need to bear substantial costs to build an ISO 8583 compliant internal system.

**4.285** We acknowledge that, as mentioned by some stakeholders (see paragraph 4.272) translation services/middleware software could be used to allow alternative providers without having to create new systems using UK bespoke standards or implementations. We note that the use of message translation services may represent a possible solution to the barrier represented by UK messaging standards (see paragraph 8.74) subject to the completion of outstanding mapping exercises between existing standards and new standards (see paragraph 4.272), but does not mean that existing messaging standards do not present a barrier to entry.

**4.286** Overall, we find that UK bespoke messaging standards make it more difficult for alternative providers to effectively compete for Bacs and FPS. We therefore consider that they represent a barrier to entry for Bacs and FPS.

### *LINK*

**4.287** We note that the LINK system is based on an implementation of the ISO 8583 standard – an acknowledged global standard for card activity. However, we do not consider that this is an enabler of interoperability between the LINK members' internal infrastructures and alternative ATM switching services providers. This is because the LINK implementation of ISO 8583 (that is, LIS5) is sufficiently different from the implementations used by alternative ATM switching services providers – for example [✂].

**4.288** This is confirmed by the fact that [✂].

**4.289** Regarding LSL's statement on connectivity issues (see paragraph 4.280), we recognise that a decision by LSL to change infrastructure provider may result in costs to be sustained by LINK members due to the consequent changes in connectivity. However, this does not weaken the argument that the standard currently used by LINK makes it more difficult for alternative infrastructure providers to provide ATM switching services to LINK.

**4.290** We find that the LINK bespoke messaging standard makes it more difficult for alternative providers to effectively compete to provide infrastructure services for LINK – representing a barrier to entry. However, we are also aware that the vast majority of LINK members already have an established connection with VISA and MasterCard core infrastructures, therefore, the extent to which LINK messaging standards represent a barrier to entry impeding competition may not be the same as for Bacs and FPS.

## Location of data centres

**4.291** Some infrastructure providers believe there is a requirement to have data centres located in the UK and that this is a barrier to entry. They said they would need to use their data centres located outside of the UK to be able to compete effectively, taking advantage of economies of scale. If they could not do this, and had to establish data centres in the UK, they said this would drive up their cost and they would not be able to offer a competitive price.

**4.292** A requirement regarding the location of data centres is not a concern for two alternative providers that, in addition to VocaLink, have data centres established in the UK. Also, several infrastructure providers have data centres within the European Economic Area (EEA) – some of which provide cross-border data processing services within the EEA.

**4.293** VocaLink noted that it provides central infrastructure services for Sweden's Bankgirot system from the UK. Another infrastructure provider added that in Europe under the SEPA model, there are infrastructure providers that use data centres located in different countries to where the services are being provided.

**4.294** Two direct PSPs said that more clarity is needed around the practical and regulatory issues related to data centres being located overseas. In particular, they questioned how these services would be regulated (for example by which authorities) and how security concerns would be addressed, such as preventing data leakage and ensuring supply of services.

**4.295** The Bank of England told us it does not explicitly require the data centres of a provider of a recognised UK payment system to be located in the UK, or for the provider to be legally incorporated in the UK. The Bank would require the provider to comply with relevant laws and acceptable risk management standards and allow the Bank to adequately supervise the UK payment system and/or PSPs.

## Our assessment

**4.296** It is not a regulatory requirement that data centres are located in the UK. We note that if a provider has data centres located in a country outside the EEA, there is an EU legal requirement to demonstrate that the country's data protection laws are adequate. In late 2015, the EU Court of Justice made a ruling that it is no longer lawful to make transfers of data under the US Safe Harbour arrangement.[95] This ruling does not prohibit the transfer of data to the US or another country outside

95 This refers to the EU Court of Justice's decision made in reference to US 'Safe Harbour' arrangement that it is no longer lawful to make transfers on the basis of the EU-US Safe Harbour framework. See Court of Justice of the European Union Press Release No 117/15, *Judgment in Case C-362/14 Maximillian Schrems v Data Protection Commissioner* (6 October 2015): http://curia.europa.eu/jcms/upload/docs/application/pdf/2015-10/cp150117en.pdf

of the EEA; it just states that the owner of the data that is processed in a country outside the EEA needs to ensure that the existing arrangements for data protection in that country are adequate.[96]

**4.297** Those providers with data centres within the EEA are subject to EU regulations, including, amongst others, financial stability and resilience requirements and data protection laws. We note that VocaLink provides central infrastructure services for Sweden's Bankgirot using its data centres located in the UK.

**4.298** We are aware that, in the past, network latency (the time taken to move data between points) was considered a potential issue for real-time synchronous payments if data centres were located too far apart. However, given improvements in telecommunications technology in recent years, this is a diminishing concern.

**4.299** Overall, we consider that the location of data centres is not a barrier to entry.

### Bundled core services

**4.300** One provider suggested that the bundled set of core services provided in UK payment systems is a potential barrier to entry. That is, in the UK the provider supplies central clearing services and a number of back-office and value-added services (for example, reconciliation and reporting services) as the core set of services. This provider noted that providers in other countries in Europe do not provide such a rich set of services, but only the central clearing and settlement services. They do not provide back-office and value-added services centrally, and therefore may not be able to provide all the services required for the core contract for the UK payment systems.

**4.301** Two other providers (one of which is a downstream provider), did not state that the bundled core services were a barrier to entry, but noted that unbundling value-added services from a leaner set of core services would encourage alternative providers to enter and compete to provide those services.

### Our assessment

**4.302** The concern that bundled core services is a barrier to entry was not raised by other providers. Also, other potential providers told us they are interested in providing the core services for Bacs, FPS and/or LINK (see paragraph 4.197). It is possible that other potential providers may also be deterred from entering if required to provide the full suite of services. However, we are mindful that limiting what can be included as part of the core services would conflict with a desire to promote innovation in core services: we want competing infrastructure providers to develop and offer new value-added services. We note that greater interoperability and simpler connectivity arrangements may allow for a change in arrangements where more than one firm provides different components of the core services.

**4.303** In our view, the package of core services should reflect the current and future needs of service-users and be procured via a competitive procurement process. This should help to make sure that the extent of bundling in core services, and what services are included in the bundle, best meet the needs of service-users.

**4.304** Overall, we do not consider bundled core services is a barrier to effective competition.

96 This is pending on more clarity at the EEA level on what constitutes an adequate level of protection when transferring data to third countries. The EU Court of Justice stated that the national supervisory authorities, when dealing with a claim, must be able to examine whether the transfer of a person's data to a third country complies with the requirements laid down by the relevant legislation.

## Conclusion

**4.305** We find there is currently no effective competition in the market for the provision of central infrastructure services for Bacs, FPS and LINK.

**4.306** Because this market lacks transparency, procurers and providers must exert some effort to establish what alternative providers and potential services are available and adequately compare them. However, the operators (as current procurers) have not periodically run competitive procurement processes or even sufficiently tested the market when reprocuring core services. Therefore, the operators have not been fully informed about alternative – and potentially more efficient and innovative – infrastructure services. As a result, the incumbent provider, VocaLink, has faced limited competitive pressure and reduced incentives to provide more efficient and innovative services. We also find that the operators do not have a strong incentive to drive effective competition, while direct PSPs do not have a strong incentive to encourage the operators to do so.

**4.307** Most operators and direct PSPs are satisfied with the value for money, quality of service and innovation they receive from VocaLink. However, we do not observe processes that would ensure that the outcomes observed meet the current and ongoing needs of all service-users. This also means that the full ongoing benefits of competition are unlikely to be achieved. We find that in the current market structure for core services, the incentives to innovate are not strong. Furthermore, there is scope for effective competition to drive improved outcomes in terms of value for money, service quality and innovation.

**4.308** We find a number of barriers to effective competition. The lack of competitive procurement exercises by the operators is a barrier to entry that prevents potential providers from competing. However there is evidence that a number of potential providers are interested in competing, and VocaLink's profitability on the provision of core services suggests providers should have an incentive to enter a procurement exercise. We also identified VocaLink's ownership arrangements (discussed in paragraphs 6.167 to 6.187) and the bespoke message standards act as barriers to entry.

**4.309** It is difficult for the PSPs and operators to anticipate what costs and risks would be involved in changing PSPs' systems to enable the switch of provider without a competitive procurement exercise or, at a minimum, market testing. These exercises would enable them to understand both the costs and benefits of switching providers.

**4.310** LSL is now legally separated from VocaLink. In our view, the current LSL contractual arrangements do not present a high barrier to competition. However, without detailed exit plans having been drafted for Bacs, FPS and LINK contracts, it is not possible to properly assess whether exit provisions create barriers to switching to an alternative infrastructure provider.

**4.311** We do not consider the location of data centres or the bundling of core services to be barriers to effective competition.

# 5.
# Competition in the provision of other infrastructure services

In this chapter we examine the effectiveness of competition in the provision of non-core infrastructure services, in particular gateway services, in Bacs, FPS and LINK. We have considered:

- the current state of competition
- barriers to switching
- barriers to entry

We find that there is currently effective competition in the provision of gateway solutions and payment service providers (PSPs) seem to have sufficient choice in providers. The costs and risks of switching providers are not a high barrier. VocaLink does not appear to benefit from a competitive advantage due to its role as the central infrastructure provider. We find that the Bacs accreditation process or costs for certain Bacs gateway solutions are not a high barrier to entry for potential BASS gateway providers.

## Introduction

**5.1** In this chapter we assess whether there is effective competition in the provision of other infrastructure services at the boundary between PSPs and the central clearing functions of payment systems, where VocaLink also provides infrastructure services such as gateway solutions.

**5.2** We consider a theory of harm that VocaLink, as the central infrastructure provider, can shut off certain markets to potential competitors of other infrastructure services. This would restrict competition in these areas, to the detriment of PSPs and their customers.

**5.3** The other infrastructure services of possible interest are:

- telecommunication lines
- Bank Reference Database Services, in particular the Extended Industry Sort Code Database (EISCD), which contain information used to validate and route payments
- gateway solutions and services, which are typically the entry point to the communication channel between the PSP (or third-party service provider) and the central clearing infrastructure, and connect to the payment system

**5.4** We noted that for telecommunication lines, stakeholders (including infrastructure providers) didn't raise any issues about competition in the provision of these services, and there are several providers in this area.

**5.5** For Bank Reference Database Services, VocaLink is the only provider (under a separate contract to the core central infrastructure services) and all interbank payment systems except LINK use their services. However, stakeholders did not raise any issues about competition in the provision of these services and we do not know of any infrastructure providers interested in competing for them on a standalone basis.

**5.6** Some providers were concerned about competition in the provision of gateway services, as VocaLink provides central infrastructure and some Bacs accreditation services.

**5.7** Therefore, our focus is on competition in the provision of gateway solutions. However, a change in central infrastructure provider could affect whether the solutions provided by VocaLink (such as the Bank Reference Database Services) need to be provided by the same entity as the central infrastructure provider (for example, as a package) and, if not, how two (or more) providers would work together. We note that it is important that an incumbent provider of any overlay or related services is not able to embed itself as a monopoly provider following a change in the central infrastructure provider. It may seek to exploit such a monopoly position if this is not properly addressed as part of a competitive procurement exercise.

**5.8** To consider competition in the provision of gateway solutions, we assess:

- the current state of competition
- barriers to switching
- barriers to entry

**5.9** We then give our overall conclusions.

## Current state of competition in gateway solutions

**5.10** PSPs use a range of solutions depending on their requirements and on the payment system they want to access. They may:

- build their gateway infrastructure entirely in-house
- buy an off-the-shelf or commoditised gateway product (typically under licence from the vendor) and host it on their own system. They might also customise the product themselves, or
- use fully outsourced gateway solutions, where a provider hosts and runs them

**5.11** If they buy solutions, the choice of provider can vary within each payment system depending on what they need. We outline these below.

### Bacs

**5.12** The choice available to a PSP for its gateway provider (for obtaining direct technical access) depends on the communication channel it uses to connect to the Bacs central infrastructure. There are three channels:

- **Bacstel-IP:** This is typically used by indirect PSPs and corporates with smaller volumes of transactions, and is input-only. They can submit payment instructions but do not get output information, which PSPs use to debit and credit customers' accounts. A gateway solution for Bacstel-IP must pass accreditation and be provided by a Bacs Approved Software Supplier (BASS).

Currently 17 providers offer approved Bacstel-IP solutions.[97] VocaLink does not, but runs the BASS accreditation service for BPSL. VocaLink approves the solutions that pass accreditation.

- **The Enhanced Transmission Service (ETS):** This is a high-speed, high-capacity channel, where transmissions travel between a PSP and VocaLink over a VocaLink network. This is an input-output channel typically used by PSPs with many transactions. There are only two providers of ETS gateways, one of which is VocaLink.

- **The SWIFTNet Transmission Service (STS):** Similarly to ETS, this is a high-speed, high-capacity channel, where transmissions travel between a PSP and VocaLink over the SWIFT network. It is an input-output channel typically used by PSPs with many transactions. As PSPs use SWIFT, they can choose from many providers of SWIFT-certified solutions to connect to that network; VocaLink doesn't offer SWIFT solutions.[98]

**5.13** Direct PSPs in the Bacs system need to connect using either ETS or STS because they get output information from the central infrastructure to debit and credit customers' accounts. Some indirect PSPs get Bacs output directly – direct technical access – so must also use either ETS or STS.

**5.14** Indirect PSPs and corporates that only need an input channel can choose between the three channels to submit payment instructions (here, indirect PSPs get their Bacs indirectly from VocaLink, via their sponsor bank). For example, some corporates that submit very high volumes use ETS or STS. Indirect PSPs and corporates can also submit indirectly through their sponsor bank or using a Bacs bureau service.

## Faster Payments Service (FPS)

**5.15** The choice of FPS gateway provider depends on the way a PSP connects to the central infrastructure:

- Direct PSPs buy solutions that they host on their internal IT systems. There are three providers, including VocaLink.

- VocaLink provides a fully outsourced (or managed) gateway solution, offering direct technical connection to FPS to one indirect PSP.

- Direct Corporate Access (DCA) via Secure-IP is typically used by indirect PSPs and corporates with fewer transactions.[99] It's based on Bacstel-IP and is input only. Solutions for Secure-IP must pass accreditation, similar to BASS approval. There are six providers of approved Secure-IP solutions.[100] VocaLink does not provide them, but runs their accreditation (similar to the BASS accreditation service).

**5.16** More gateway solutions are being developed for FPS (known as new FPS technical access solutions) that aim to make it easier and cheaper for direct and indirect PSPs to connect to the FPS system.[101] About ten providers, including VocaLink, have said they will offer them and five of these have been accredited by FPSL.[102]

97 A list of these providers is published on the Bacs website: bacs.co.uk/Bacs/SoftwareSuppliers/ApprovedSoftware/Pages/Index.aspx

98 A list of these providers is published on the SWIFT website: swift.com/about-us/partner-programme/swift-certified-applications/swift-certified-applications-finder

99 File Input Module (FIM) channel is another channel available to indirect PSPs, but it is not used by any of them. Therefore we do not consider it here.

100 BPSL manages the approval process on Secure-IP on behalf of FPSL. A list of these providers is published on the Bacs website: bacs.co.uk/Bacs/SoftwareSuppliers/ApprovedSoftware/Pages/Index.aspx

101 The new FPS technical access solution is discussed in more detail in our report *Access and governance of payment systems: the operators' progress and areas for ongoing focus* (15 December 2015): psr.org.uk/psr-publications/news-announcements/access-and-governance-report; and on the FPS website: fasterpayments.org.uk/access-payments/economics-new-access-model

102 These providers are listed on the FPS website: fasterpayments.org.uk/access-payments/economics-new-access-model
Those that have been accredited are also listed on the website: fasterpayments.org.uk/access-payments/aggregator-fp-solution-providers

### LINK

**5.17** Here, gateway solutions are the software products that route a PSP's ATM transactions to the appropriate payment system (LINK, MasterCard or Visa). PSPs can either:

- buy a solution that they host; there are at least six providers, although VocaLink is not one, or
- use a fully outsourced solution, known as a Certified Service Bureau (CSB); there are at least nine CSBs, including VocaLink

### PSPs' views

**5.18** A few PSPs told us that the solutions they need can differ significantly depending on their size and geographical reach, the kind of operations they run and their resources and expertise.

**5.19** PSPs usually either:

- buy a commoditised gateway product and customise it to integrate the solution with its systems or needs, or
- use fully outsourced solutions

**5.20** Some PSPs use a mix of customisation and outsourcing of solutions for different payment systems. One built its gateway solutions entirely in-house.

**5.21** Six PSPs that fully outsource a solution said this option offers lower cost, lower complexity and better functionality compared with what they could develop in-house. Five PSPs that build or customise in-house said this offers greater control over the operation and functionality of their infrastructure and can be cheaper with large transaction volumes. Two PSPs also noted that buying a solution means the provider rather than the PSP is responsible for updates and compliance with operators' rules and technical standards.

**5.22** Overall, ten direct PSPs and three providers said there was good competition in the provision of gateway solutions. The providers offer different types of gateway solutions which ranged from fully outsourced services to customised products that PSPs host themselves.

**5.23** However, the stakeholders noted that the degree of this competition varies between payment systems:

- **Bacs:** Two PSPs and four providers believe the provision of Bacs solutions is a mature market, and PSPs have a choice of provider. For Bacstel-IP, one PSP and a provider noted the large number of BASS providers. However, one provider said that most Bacstel-IP transactions are processed using software from just two providers. For STS, one PSP noted that PSPs can use any SWIFT-certified provider for solutions, of which there are many. In contrast, two noted that there are only two providers of ETS gateways, one being VocaLink.
- **FPS:** Two PSPs said several providers offer solutions that PSPs host on their systems. In contrast, others thought competition in FPS solutions has been limited, particularly in outsourced (managed) solutions, which only VocaLink provides.[103] Some said this element of the FPS market will open up as new FPS technical access solutions make it easier for PSPs to connect to the FPS central infrastructure.[104] Those PSPs considering the new FPS offerings are discussing these with

103 This refers to VocaLink's solution, previously known as the Faster Payments Managed Services solution, which only one indirect PSP used for direct technical access to FPS.

104 One provider suggested that FPSL has delayed these solutions coming to market.

providers including VocaLink. No PSPs were worried about the number of Secure-IP providers for DCA services.[105]

- **LINK:** Three PSPs and one provider noted that there are several providers offering different gateway solutions and that solutions vary depending on PSPs' differing requirements (see paragraph 5.19). Four PSPs said that not all can meet the requirements of each PSP, but there is still enough choice.

**5.24** PSPs select their provider by open or closed tender. Most have teams and policies for the procurement of gateway solutions (and other products and services).

**5.25** Seven PSPs said that the key factors in selecting a provider were resilience, quality of service and value for money. Four PSPs think VocaLink's role as the central infrastructure provider is a positive factor when considering VocaLink's gateway solutions. They believe VocaLink has greater expertise in the provision of downstream infrastructure that connects to the central infrastructure.

## Our assessment

**5.26** There appears to be effective competition in the provision of gateway solutions, and PSPs have enough choice of provider.

**5.27** PSPs use a range of gateway providers – not just VocaLink – within each payment system, including across ETS and STS for Bacs. There is also evidence that PSPs can choose from several providers in each payment system:

- **Bacs:** In Bacs, PSPs can use 17 BASS providers and numerous gateway providers to connect to SWIFTNet and STS. While there are only two providers of ETS solutions, they compete against providers of STS for PSPs needing input-output channels (as they will choose between access via ETS or STS). They also compete against both BASS and STS providers for business that only needs an input channel (and do not directly receive output), to the extent that customers view these channels as interchangeable.

- **FPS:** In FPS, there are three providers of gateway solutions used by PSPs, and six providers of Secure-IP solutions for the DCA service. Further competition is expected, with about ten potential providers of the new technical access solutions (including the three offering hosted FPS gateway solutions). Some PSPs are considering using providers other than VocaLink.

- **LINK:** In LINK, there are at least 15 providers, ranging from hosted to fully outsourced solutions.

**5.28** PSPs typically appear to obtain gateway solutions in a competitive manner and try to find the offer that best suits them. While some believe VocaLink's solutions benefit from it being the central infrastructure provider, they either do not use VocaLink, or noted that other providers may offer better solutions.

**5.29** Five PSPs did not select VocaLink because its solution did not meet all their needs; one even left for another provider for the same reason.

**5.30** A market development that could affect competition in the gateway market is the development of gateway solutions that enable a PSP to access multiple payment systems via one solution. These solutions would potentially compete against those existing solutions that connect a PSP to an individual payment system. For example, VocaLink told us that it is looking to develop its FPS gateway solution, PayPort, to enable additional access to Bacs (through the ETS channel) as well as to SWIFT and SEPA.

105 Some concerns were raised about the DCA channel with respect to technical access to FPS. These issues are explored in our *Market review into supply of indirect access* (July 2016): https://www.psr.org.uk/psr-publications/market-reviews/MR1513-final-report-supply-of-indirect-access-payment-systems

## Barriers to switching

**5.31** We asked if there were any barriers to PSPs switching gateway providers.

**5.32** Five PSPs told us that it is technically possible to switch providers. However, over half the PSPs we spoke to thought the costs and risks involved in switching providers could be a barrier. These costs – changing internal IT systems and testing the new connection, and the risk of disruption of service to customers – could outweigh the benefits.

**5.33** Three PSPs wouldn't consider switching as they haven't had any issues with their current solutions. This is particularly true of several PSPs' solutions for LINK (or ATM and cards processing generally), which have been in place for decades. However, a few of these PSPs occasionally review their solutions.

**5.34** Four PSPs and one infrastructure provider said that, because of the costs and risks involved with changing providers, they would only consider switching if external developments warranted a significant change to their systems. This could be a significant upgrade or standard change within a payment system, a merger with another company, or a change in business strategy that affects how they connect to payment systems.

**5.35** However, six smaller PSPs have recently switched to a new provider, are currently doing so (at the time we spoke to them), or will consider it in the near future. While it is not a decision to be taken lightly and they would not do it often, they said the benefits (such as better prices and/or quality of service) outweighed the costs and risks involved.

**5.36** No other barriers to switching providers were identified. We asked PSPs about the intellectual property rights (IPR) and security protocols and standards for gateway solutions. Three said the provider typically owns the IPR, but did not feel it was a barrier to switching. Seven PSPs set the security protocols and standards (incorporating the operators' requirements where relevant) that solutions need to meet, and none said it was a barrier to switching.

### Our assessment

**5.37** We conclude that the cost and risk of switching gateway providers are not a high barrier. There are costs and risks involved with switching, but PSPs have switched when they wanted to. Four have recently switched or are in the process of doing so for a positive business case.

## Barriers to entry

**5.38** We assess whether VocaLink may be able to foreclose the market for the provision of gateway solutions by creating barriers to entry. We also want to assess if there are other barriers that could affect competition in this area.

**5.39** Two providers and one direct PSP think VocaLink has a competitive advantage in providing solutions. They believe PSPs (and other users, such as corporates) view VocaLink's solutions as better, more resilient and/or higher quality because it provides the central infrastructure services these gateways connect to.

**5.40** For Bacs, two providers said that because PSPs decide between using Bacstel-IP, ETS and STS to connect to the central infrastructure, VocaLink's ETS is also in competition with both STS and Bacstel-IP.

**5.41** Two providers noted that VocaLink may have an advantage in developing new gateways, such as the new FPS technical access solution. VocaLink, as the central infrastructure provider, would have first sight of technical specs related to interfacing with the central infrastructure. VocaLink could make this available to its commercial business area before other gateway providers, and bring its propositions to the market sooner. One provider said it has had struggled to get technical specifications needed to develop solutions for [✂] held by VocaLink channels.

## BASS accreditation

**5.42** Some providers identified Bacs-specific barriers to entry, as VocaLink runs the accreditation process for BASS providers for Bacstel-IP (i.e. it approves them).[106]

**5.43** Two providers were worried about the lack of transparency around the BASS accreditation process, including the standards and technical specifications used for accreditation. Bacs Payment Schemes Limited (BPSL) determines them, but it is not clear if VocaLink applies them consistently and could even make it difficult for other providers to get solutions approved. One gave an example where its solution failed despite having previously been approved and without any change to the solution or the accreditation standards and specifications. The provider amended the solution, which was approved after re-testing.

**5.44** One provider was worried that the cost of Bacs accreditation for Bacstel-IP acts as a barrier to entry. It believed it should be clearer what VocaLink's costs of accreditation cover. The provider added that, while the BASS accreditation cost has not changed, it has deterred some from seeking approval.

**5.45** Another provider noted that the accreditation protocol of having a proprietary approach where potential providers must send their solutions to VocaLink for approval is a historical concept. It said that nowadays, it is common to use an API approach. The API standards are open and transparent and potential providers can more easily develop their solutions to meet them.

**5.46** In contrast to these views, three providers and a PSP – including one of the providers that raised concerns – noted that, while prospective infrastructure providers must ensure they meet the accreditation standards and specifications, this has not been a barrier to them entering the market. A further two providers, one operator and two direct PSPs said they were not aware of any issues with providers entering because of the BASS accreditation process. One operator noted that there is no conflict of interest for VocaLink because it does not provide Bacstel-IP gateway solutions.

**5.47** One direct PSP and one indirect PSP said that greater transparency around the accreditation process would help other providers to better understand what they are assessed against and the costs associated with being accredited. They said this would help to ensure there is no conflict of interest for VocaLink and encourage potential providers to enter.

**5.48** One direct PSP and one operator noted that VocaLink (as the central infrastructure provider) does not need to provide the accreditation services. They highlighted that the new aggregator solutions in FPS will be accredited by an independent third party.

**5.49** BPSL and VocaLink noted that they were willing to work to identify or address any deficiencies with the accreditation process. Furthermore, BPSL said that it is planning to review all the Bacs accreditation processes as part of its review of access models for Bacs. It said it will maintain a dialogue with us during this review. BPSL said it is mindful that the accreditation process should not unnecessarily restrict potential providers.

## Our assessment

**5.50** We do not find that VocaLink benefits from a competitive advantage as central infrastructure provider due to a perception that it offers better solutions or could bring solutions to market sooner. As outlined in paragraphs 5.27 to 5.29, we find there are a several providers competing in the market and the direct PSPs use a range of providers (not just VocaLink) and several operate within each

106 Stakeholders did not raise any concerns about competition in or barriers to entry for provision of gateways for the FPS Secure-IP channel.

payment system and across the channels within Bacs and FPS. Those direct PSPs that are considering using the new FPS technical access solutions are looking at several providers.

**5.51** It could be argued that VocaLink may have an incentive to block potential BASS providers by making the accreditation process difficult. The incentive to foreclose this market may arise because VocaLink's ETS solution competes with the other ETS provider's solution, but also with STS providers and to some degree Bacstel-IP (for indirect PSPs and those needing input-only solutions). However, plenty of BASS and STS providers do compete in this area, which suggests that even if VocaLink was attempting to foreclose the market it has not been successful. Furthermore, this level of competition also suggests there is little profit for VocaLink to foreclose the market to potential BASS gateway providers looking to enter it.

**5.52** BPSL is responsible for setting the cost of BASS accreditation services, not VocaLink. This means VocaLink cannot use accreditation costs to foreclose the market to potential Bacstel-IP providers. However, the cost of accreditation may still stop some providers. This cost has not changed for a long time, so may not be frequently reviewed.

**5.53** We acknowledge that some stakeholders perceive that VocaLink (in its capacity as the provider of certain accreditation services for gateway solutions) may have an incentive and ability to foreclose the market. This could weigh on potential providers' perceived likelihood of their successful entry into the market and therefore their incentive to incur the costs involved with trying to enter. We acknowledge stakeholders' views around the transparency of this process and the approach used.

**5.54** However, we find that the accreditation process or costs are not a high barrier to entry for potential BASS gateway providers.

**5.55** Nonetheless, we welcome BPSL's plan to review its accreditation processes. We also note another example of a positive development in addressing these perceptions is FPSL's accreditation service for the new FPS technical access solutions. Given that VocaLink plans to compete in this space, FPSL has decided to use an independent third party to provide the accreditation services. We expect this will help address perceptions that VocaLink is able to foreclose this particular market or has a competitive advantage.

## Conclusion

**5.56** Overall, we find there is currently effective competition in the provision of gateway solutions. The evidence shows that PSPs have enough provider choice, and do not all use the same provider.

**5.57** The costs and risks of switching gateway providers are not a high barrier. While PSPs do not switch often, they have done so when there has been a positive business case for it.

**5.58** VocaLink does not appear to gain a competitive advantage for gateway solutions due to its role as the central infrastructure provider. We acknowledge stakeholders' views on transparency around the BASS accreditation process. However, we find that the accreditation process or costs are not a high barrier to entry. Nonetheless, we welcome BPSL's plan to review its accreditation processes.

# 6.
# Ownership and control of payment systems

In this chapter, we examine the ownership and governance arrangements of VocaLink and the operators by PSPs, to understand how this affects competition in the provision of central infrastructure services.

We assess how PSPs exercise control over the decisions made by the infrastructure provider and the operators through existing governance arrangements. We consider whether this may result in reduced competitive pressure on VocaLink.

We also examine stakeholders' views on VocaLink's current ownership arrangements.

We find that a relatively small number of large PSPs own and control the Bacs, FPS and LINK payment system operators and the infrastructure provider – VocaLink – for these systems and they are also their main users. We find that, because the largest members of the operators have ownership interests in VocaLink and are able to exert control over both operator and VocaLink, the level of competition for the provision of central infrastructure services is reduced. This is because:

- **The four largest VocaLink shareholders have an interest in protecting VocaLink from competition.** Exposing it to competition would also put at stake VocaLink's value, and could result in the owners facing calls for capital. Exposing VocaLink to competition [✂]. Their control of the operators allows them to protect VocaLink from competition for the provision of services to Bacs, FPS and LINK. VocaLink's attempts to use the links between its owners and the operators to protect its position potentially exacerbates the owners' incentives to protect VocaLink from competition.
- **The four largest VocaLink shareholders are unwilling to turn to infrastructure suppliers other than VocaLink as they perceive there is a benefit of using a supplier they control.** They see their ownership and influence over VocaLink as a way of ensuring stable, secure and resilient services. Their control of the operators in these matters allows them to ensure that VocaLink continues to be the supplier.
- **Current ownership and governance arrangements discourage alternative providers of central infrastructure services from entering the UK market.** Some alternative infrastructure providers believe VocaLink's shareholders would favour VocaLink in a competitive procurement. Their control over the operators allows these owners to favour VocaLink in a competitive procurement.

## Introduction

**6.1** In this chapter we analyse VocaLink's and the operators' ownership and governance arrangements, and how they affect competition in the provision of central infrastructure services for Bacs, FPS and LINK. We are assessing whether current ownership and governance arrangements lead to a restriction or distortion of competition.

**6.2** PSPs with direct access to the Bacs, FPS and LINK payment systems (Direct PSPs, generally these are banks and building societies in this context) are also, in most cases, the owners[107] of the operators of those systems. Bacs, FPS and LINK have evolved as collaborative systems, operated by not-for profit entities, and owned[108] by PSPs themselves. Many of the same PSPs also own VocaLink – the infrastructure provider for Bacs, FPS and LINK. These PSPs also tend to be the largest users of these payment systems.

**6.3** The co-operative nature of these arrangements, and the vertical relationship between direct PSPs, operators, and VocaLink could lead to concerns about larger direct PSPs' control and influence over payment systems.

**6.4** The rules of payment systems and procurement of the infrastructure provider are generally determined by boards of directors and/or membership committees appointed by PSPs which are also the owners of VocaLink (see Table 2). We therefore consider whether the overlapping ownership of VocaLink and the operators by large PSPs may hinder competition for infrastructure provision.

**6.5** In order to understand whether the common ownership of VocaLink and the operators has an impact on competition, we explored two hypotheses:

- Whether the current ownership arrangements give a sub-group of PSPs the incentive and ability to protect VocaLink from competition.
- Whether the current ownership arrangements deter rival suppliers from entering the UK market for infrastructure services.

**6.6** We assess whether the current ownership and governance arrangements give PSPs, or some sub-group of PSPs, control over VocaLink, BPSL, FPSL and Link.

**6.7** We also examine the incentives that arise from the current market structure and, to the extent PSPs or operators have the ability to act on these incentives, the impact they have on competition. Some of this analysis is relevant to our assessment of control, and to that extent is covered in that section. As part of this analysis, we review stakeholders' views on the benefits and drawbacks of current arrangements, although we note that this is not intended to be an assessment of the proportionality of any proposed remedy in this area.

**6.8** We then assess the perceptions the current arrangements give rise to and how these affect potential market participants' behaviour.

## Ownership of VocaLink and operators

**6.9** Currently, 17 PSPs (from 13 banking groups) are VocaLink shareholders. We focus on the banking groups here as this aligns most closely with the governance of VocaLink and the operators whereby it is the groups who are represented (see paragraphs 6.23, 6.33, 6.39 and 6.50). These four, Barclays Bank PLC, HSBC Bank PLC, Lloyds Banking Group and Royal Bank of Scotland Group, which are the largest VocaLink shareholders, together own more than 77.6% of the shares. In the rest of the chapter, we will be referring specifically to these as the four largest shareholders of VocaLink.

**6.10** BPSL, the Bacs operator, is a company limited by guarantee and does not have shareholders. Every member guarantees the company by an amount not exceeding £10.[109] BPSL currently has 16

107 Guarantors for Bacs and FPS and members for LINK.

108 Bacs, FPS and LINK are membership organisations and have no shareholders.

109 A company limited by guarantee is an alternative type of corporation used primarily for non-profit organisations that require legal personality. A company limited by guarantee does not have share capital or shareholders, but instead has 'members' who act as guarantors. – *A review of governance and ownership of payment systems, Appendix c, page 64.*

members, which are banks and building societies. Ten of these are also shareholders of VocaLink, including its four largest shareholder PSPs.

**6.11** FPSL, the FPS operator, is a private company limited by guarantee. FPSL does not have shareholders. The liability of each member is limited to £1. FPSL currently has ten member organisations which are banks and building societies. Eight of these are also shareholders of VocaLink, including its four largest shareholder PSPs.

**6.12** There are two key governance organisations for LINK: Link Scheme Limited (LSL) and the Network Members Council (NMC). The operator of LINK – LSL – was incorporated in December 2014 as part of the restructure of LINK, in order to make it legally separate from VocaLink. The restructuring was completed in April 2016. LINK has a single tier of membership, with all 38 members represented at LINK's Members body, the NMC.[110] All 38 NMC Members are also shareholders of LSL. Thirteen of the PSPs on the NMC are also shareholders of VocaLink, including its four largest shareholder PSPs.

**6.13** Table 1 shows the various shareholders that own VocaLink and whether they are members or shareholders of BPSL, FPSL and LINK (NMC and LSL). We have listed these at group level only where relevant.

***Table 1: Ownership of VocaLink and operators of Bacs, FPS, LINK (NMC and LSL)***

| VocaLink shareholder | 31 Dec 15 VocaLink shareholding (%) | Bacs Payment Schemes Limited | Faster Payments Scheme Limited | LINK Network Members Council | Link Scheme Limited[111] |
|---|---|---|---|---|---|
| AIB Group (UK) Plc. | 0.84 | Member | | Member | Shareholder |
| Barclays Bank Plc. | 15.18 | Member | Member | Member | Shareholder |
| Bristol & West Plc.[112] | 0.69 | | | Member | Shareholder |
| Coventry Building Society | 0.72 | | | Member | Shareholder |
| HSBC | 15.91 | Member | Member | Member | Shareholder |
| Lloyds Banking Group | 25.10 | Member | Member | Member | Shareholder |
| Clydesdale Bank PLC | 3.24 | Member | Member | Member | Shareholder |
| Nationwide Group | 4.34 | Member | Member | Member | Shareholder |
| Santander Group | 7.76 | Member | Member | Member | Shareholder |
| The Co-operative Bank Plc. | 3.31 | Member | Member | Member | Shareholder |
| The Royal Bank of Scotland Group | 21.40 | Member | Member | Member | Shareholder |
| Virgin Money Plc. | 0.79 | Member | | Member | Shareholder |
| Yorkshire Building Society | 0.72 | | | Member | Shareholder |

*Source: VocaLink 2015 annual report, BPSL 2014 annual report, FPSL 2015 annual return, LINK website*
*Note: Citibank and Danske Bank are the only non-VocaLink shareholders who are direct members of Bacs and FPS, and are entitled to nominate directors of BPSL and FPSL. The LINK NMC has 38 members in total, 15 of which are part of banking groups that are VocaLink shareholders.*

**6.14** Table 1 above shows that VocaLink and the operators have common ownership. That is, the majority of the PSPs that are members or shareholders of the operators of the Bacs, FPS and LINK payment systems are also shareholders of VocaLink.

**6.15** This common ownership is not necessarily an issue in itself. Indeed there could be benefits, as we acknowledge at paragraph 6.142 below. However, as stated at paragraph 6.5 we consider there are plausible hypotheses that this common ownership restricts competition for the provision of central infrastructure.

110 See Annex 3 for more information on LINK governance arrangements.
111 All NMC Members are also shareholders of LSL on a one Member one vote trust arrangement.
112 Bristol & West Plc is part of the Bank of Ireland Group.

## Corporate governance and decision-making processes at VocaLink and at the operator level

### *PSP representation on VocaLink and operator boards*

**6.16** We set out a summary below of the PSPs' representation on the boards of VocaLink and the operators. We provide a detailed description of the governance of each of these systems in Annex 2 and Annex 3.

**6.17** Table 1 above shows the groups' shareholding in VocaLink and the ownership of operators. Table 2 below repeats some of this information but rather than showing ownership it focuses on representation on decision-making bodies.

***Table 2 VocaLink shareholders and their involvement in the governance of Bacs, FPS and LINK***

| VocaLink shareholder | 31 Dec 15 VocaLink shareholding (%) | VocaLink board | Bacs Payment Schemes Limited | Faster Payments Scheme Limited | LINK Network Members Council[113] |
|---|---|---|---|---|---|
| AIB Group (UK) Plc. | 0.84 | | Director | | Member |
| Barclays Bank plc. | 15.18 | Director | Director | Director | Member |
| Bristol & West Plc. | 0.69 | | | | Member |
| Coventry Building Society | 0.72 | | | | Member |
| HSBC | 15.91 | Director | Director | Director | Member |
| Lloyds Banking Group | 25.10 | Director | Director | Director | Member |
| Clydesdale Bank PLC | 3.24 | | Director | Director | Member |
| Nationwide Group | 4.34 | Director | Director | Director | Member |
| Santander Group | 7.76 | Director | Director | Director | Member |
| The Co-operative Bank Plc. | 3.31 | | Director | Director | Member |
| The Royal Bank of Scotland Group | 21.40 | Director | Director | Director | Member |
| Virgin Money Plc. | 0.79 | | Director | | Member |
| Yorkshire Building Society | 0.72 | | | | Member |

*Source: VocaLink 2015 annual report, BPSL 2014 annual report, FPSL 2015 annual return, LINK website*
*Note: Citibank and Danske Bank are the only non-VocaLink shareholders who are direct members of Bacs and FPS, and are therefore entitled to nominate directors of BPSL and FPSL. The LINK NMC has 38 members in total, 15 of which are part of banking groups that are VocaLink shareholders.*

**6.18** Table 2 shows that there is a considerable overlap in terms of the PSPs that sit on the VocaLink board and the PSPs that sit on the governing bodies of the operators. In particular, it is clear that the four largest VocaLink shareholder PSPs are also represented on the governing bodies of all the operators.

### *Overview of VocaLink's corporate governance*

**6.19** As set out at paragraph 6.9 above, VocaLink's shareholders fall into 13 banking groups. The four largest shareholders are Lloyds Group, Barclays Bank, Royal Bank of Scotland Group and HSBC with a combined share of the issued share capital of 77.6% (see Table 2).

**6.20** Shareholders of VocaLink have voting rights at the company's annual general meeting on a number of reserved matters, such as the issue of share capital, changes to the company's terms of reference,

113 See paragraph 6.48 and Annex 3 for further information on LINK governance and the responsibilities of LSL and the NMC.

and other decisions that have been referred to a shareholder vote by the board of directors or the board's various committees (see Annex 2 for further details). Reserved matters cannot be undertaken by the board without the prior consent of shareholders who hold shares which together carry either 50% or 75% of the votes (as required by each individual reserved matter). Given that the four largest shareholder PSPs have a combined voting power of over 77%, any matter referred to a shareholder vote could be blocked or passed by this group of shareholders without taking into account the views of other shareholders.

**6.21** The following are examples of reserved matters which require 75% of votes to pass:

- Any change to the right attaching to any class of shares in the company
- Any reduction of the share capital of the company
- Any resolution to wind up the company
- The filing of any petition for winding up by the company or the making of any arrangements with creditors generally or any application for an administration order or for the appointment of a receiver or administrate receiver
- Any proposal to materially change the business of the group
- The approval or adoption of a dividend policy of the company
- The sale, disposal or acquisition of any business, undertaking or assets, whether by a single transaction or series of transactions where: (i) the gross value of the consideration which will or may be received, paid or issued as a result of the transaction(s) represent more than 25% of the net asset value of the group; or (ii) the gross assets which are the subject of the transaction(s) represent more than 25% of the gross assets of the group; or (iii) the profits attributable to the asses which are the subject of the transaction(s) represent more than 25% of the total profits of the group
- Any increase in the authorised or issued share or loan capital of the company
- The creation, consolidation, sub-division, conversion or cancellation of any share capital or loan capital of the company
- The grant of any option or right to subscribe or acquire, or convert any security into, any share or loan capital of the company
- The creation of any new equity interest in the company including any arrangements for sharing of income or profits or any other interest whether in the form of shares, convertible securities, or loan stock or loan capital convertible into shares or the establishment of the company of any share-based bonus, incentive, profit sharing or share option scheme
- The purchase or redemption of any share capital or loan capital of the company
- The admission to trading or public dealings of all or any securities of the company on an exchange[114]

**6.22** We looked at the voting records at VocaLink shareholder meetings between 2012 and 2016 (to date). We found no instances of the largest four VocaLink shareholder PSPs voting differently from each other on matters where we consider them to have a common interest (see paragraphs 6.74 to 6.76 and 6.124). [✂].

114 VocaLink, *Articles of Association*, sections 21(1) to 21(23).

**6.23** The board is responsible to shareholders for the ongoing management of the group's businesses. The membership of the board of VocaLink Holdings Limited includes six non-executive directors appointed by shareholders. Each shareholder is entitled to nominate a director; shareholders then vote for candidates. The final list of shareholder directors is composed of the six candidates who get the highest number of votes. In practice, as voting is determined by shareholding, this means that four out of the six shareholder directors on the VocaLink board are the nominees of the largest four shareholders (see paragraph 6.9). The record of director attendance at VocaLink board meetings between 2007 and 2016 shows [✂]. We note that one shareholder director is drawn from one of the smaller shareholders (currently Nationwide) to represent the interests of minority shareholders on the board.

**6.24** The board also includes four independent non-executive directors and two executive directors.[115] The board has the power to appoint and remove the executive directors. The four independent non-executive directors are appointed by the board. The Nominations Committee is consulted and can make recommendations on appointments to the board.

**6.25** According to the Articles of Association, all decisions are made by a majority vote of the directors attending the board meeting. Voting at the board is based on one director, one vote. The quorum necessary for the transaction of any board business is five or more directors present in person and entitled to vote, of which three must be shareholder directors. The Articles of Association requires that questions arising at any meeting of directors will be determined by a majority of votes and in the case of an equality of votes the matter will be designated as a Reserved Matter and referred to shareholders for decision.[116] We do not know the PSPs voting patterns in board decisions because we've been told that voting patterns are not recorded and decisions are taken by consensus.

**6.26** In accordance with the Articles of Association, the board may also delegate some of its powers, authorities or discretions to various Committees. These could be made up of participants that include shareholder directors. Committee decisions are referred back to the board for final approval. The board has delegated some of its powers, authorities or discretions to a number of committees,[117] including the Operational Oversight Committee (OOC). The OOC's purpose is to:

a. Protect the integrity of Bacs, FPS and LINK (the 'core services') and maintain contracted service levels.

b. Maintain a level of core service investment that will allow VocaLink to re-tender for the core services contracts when they expire.

c. Ensure that the continued resilience, integrity and viability of the core services are not put at risk.

**6.27** The Terms of Reference of the OOC say that it will be composed of nine members: four shareholder directors (or their nominees), three shareholder representatives (who have experience in operational management, systems architecture/design, project management and security), the Chairman of the company and one senior non-independent director. The quorum for the Committee is three members, two of which must be shareholder directors (or their nominees/representatives). The Chairman has a casting vote in the event of a deadlock.

**6.28** We understand the OOC is currently comprised of seven members, four of which are representatives of the four largest shareholder PSPs. The representatives of these four banks therefore have a majority of votes on this Committee.

**6.29** Should the OOC (acting by a majority) reasonably consider that the board has not, or is unlikely to, carry out a decision made by the Committee, then the Committee may escalate the issue to the

115 'Independent' is defined in VocaLink's Articles of Association as 'not having been employed by or acted as a consultant for any shareholder in the last three years or having an interest directly or indirectly in any contract with VocaLink of any shareholder (including being employed by or acting as a consultant to any third party who has entered into a contract with a shareholder) which would cause the director to not be able to act independently in the best interests of the company at all times'.

116 VocaLink, *Articles of Association*, section 28.2.

117 VocaLink, *Articles of Association*, section 28.11.

shareholders as a reserved matter. However, the Committee does not have authority to escalate any matter to shareholders which, if implemented, would require a change to the core services contracts. In these instances, such requests would have to go through the VocaLink board. The relevant boards of the operators affected by the changes would also have to approve them before the contract could be changed.

## Overview of the operators' corporate governance

### *Bacs Payment Schemes Limited*

**6.30** As set out at paragraph 6.2 above, BPSL is a not-for-profit company limited by guarantee that does not have shareholders. Instead, it has 16 members. The four largest VocaLink shareholder PSPs are also the largest members of BPSL by processing volume (see paragraph 6.33).

**6.31** The company is managed by a board of directors who may exercise all the powers of the company. The board makes decisions on issues such as: the operation of the service, infrastructure provider contracts, and the resilience of the service.

**6.32** The board is composed of 15 directors: a Managing director/Chief Executive, two independent directors (including the board Chair and the Chair of the Audit and Risk Committees), and 12 non-executive directors nominated by the members. A quorum is attained at a general meeting of the Bacs board when at least one independent director and other directors making up half of eligible votes are present. Each of the 16 members has the right to appoint itself a representative on the board, However, only one director can be appointed from each corporate group. For example, Royal Bank of Scotland Group includes three separate entities that are members, but only appoints one director.[118]

**6.33** Issues that come up at a board meeting are decided by a vote, with the board allocating a total of 1,000 votes to board directors who are nominated by members. These 1,000 votes are allocated to each member on the basis of the number of transactions carried out by that member in the preceding year. No member is entitled to more than 22.5% of the total votes. Each independent director has one vote. In practice, votes can be decided by a show of hands on the basis of one director/one vote but any director can request votes to be counted based on voting rights. For a resolution to be carried, the general rule is that it needs the support of at least 75% of the votes of all directors entitled to vote. For resolutions pertaining to the public interest (see next paragraph) to be carried, there is an additional requirement that it must be supported by one Independent director.

**6.34** According to the BPSL articles of association, the definition of a matter of public interest is 'a matter concerning the Company, the Payment System and the payments industry for the long term benefit of the UK, its citizens and businesses as a whole, with particular emphasis on customer needs, competition, innovation, reducing barriers to entry in the payments industry and limiting systemic risk'.[119]

**6.35** We examined the voting records of BPSL board meetings between 2012 and 2016 (to date). We found no instances of the largest four VocaLink shareholder PSPs voting differently from one another. The board voted on matters on only two occasions between 2012 and 2016.

118 Coutts, NatWest and The Royal Bank of Scotland are all part of The Royal Bank of Scotland Group: https://www.bacs.co.uk/About/Pages/BacsMembers.aspx

119 BPSL, *Articles of Association of Bacs Payment Schemes Limited*, (2013), page 7.

6.36 Table 3 shows the distribution of votes on Bacs' board for 2014.

***Table 3: Distribution of votes on Bacs' board***

| Bacs member | Share of votes on Bacs' board for 2014 (%) |
|---|---|
| Lloyds Banking Group | [✂] |
| The Royal Bank of Scotland Group | [✂] |
| HSBC | [✂] |
| Barclays Bank plc. | [✂] |
| Santander Group | [✂] |
| Nationwide Group | [✂] |
| The Co-operative Bank Plc. | [✂] |
| Clydesdale Bank PLC | [✂] |
| AIB Group (UK) Plc. | [✂] |
| Virgin Money Plc. | [✂] |
| Danske Bank | [✂] |
| Citibank | [✂] |
| Independent Director, Independent Chair and Managing Director | [✂] |
| Bank of England | [✂] |

*Source: PSR calculations based on BPSL data*
*Note: Lloyds Banking Group includes HBOS; RBSG includes Royal Bank of Scotland, Coutts & Co and NatWest.*

## Faster Payments Scheme Limited

6.37 As set out at paragraph 6.2 above, FPSL is a private, not-for-profit membership company limited by guarantee. It does not have shareholders. The scheme has ten member organisations, including the four largest shareholders of VocaLink.

6.38 The company is managed by a board of directors, which makes key decisions regarding the business of the company at FPSL board general meetings. The board makes decisions on matters such as: the operation of the service, innovation opportunities and the development of additional services.

6.39 The board is composed of 14 directors: three independent directors (including the chair), one independent executive director and ten non-executive directors. The ten non-executive directors are appointed by the ten members. Each member is entitled to appoint one director, but PSPs belonging to the same group get to appoint only one director for the group. The independent directors are appointed by the board based on the recommendation of an appointment committee. Although the appointment committee that recruited the first independent directors included directors from the member banks, the Appointment and Assessments Committee is now made up of only independent non-executive directors and the chief executive. As a result, recent recruitments and reappointments by the Committee have been made without member director involvement.[120]

6.40 In accordance with the Articles of Association, a quorum is attained at a board meeting when there are 75% of directors present who together account for at least 50% of the total clearing volume of the FPS payment system for the year before and must include at least one independent director.[121] Resolutions are decided by a vote as indicated by a show of hands although directors can require decision to be made by reference to their voting rights. A decision is considered to have been made

120 According to the FPSL articles of association, 'independent' means a director who the Board, upon the recommendation of the Appointment Committee, determine to be independent in character and judgment and whose relationships or circumstances are unlikely to affect, or appear to affect, the director's judgment. For these purposes, the following relationships or circumstances shall, unless otherwise determined by the Board, be presumed to preclude a director's independence.

121 Faster Payments Scheme Limited, *Articles of Association*, section 21.8 (i): http://www.fasterpayments.org.uk/sites/default/files/Articles%20of%20Association27042015.pdf

when 75% of directors present at the meeting are in favour, provided that the 75% of directors account for at least 50% of the clearing volume of the system. Where a board resolution involves a matter concerning the public interest, it can only be passed when a majority of independent director present votes in favour. A matter is deemed to concern the public interest if one of the independent directors, acting reasonably, considers that to be the case.

**6.41** FPSL told us that, in the period from 2012 until 2016 (to date) all board decisions have been unanimously agreed without a need for a vote, with one exception. This was the decision to enter a new contract with VocaLink in January 2014. At that board meeting the director nominated by a one of the four largest PSPs stepped out of the board for the decision and agreed to vote in alignment with the decision the board would make in their absence. It said that this was effectively an abstention to avoid perceived conflicts of interest. In the absence of this PSP the board agreed unanimously.

### *The Link Scheme Limited*

**6.42** Chapters 3 and 4 (paragraphs 3.65 to 3.67, 3.94, 4.230 to 4.235) and Annex 3 (paragraphs 3.34 to 3.40) provide an overview and discussion of the separation arrangements between LINK and VocaLink, in addition to details relating to the new switching and settlement agreement between Link Scheme Limited, VocaLink and the network members. In this section, we provide an overview of the governance arrangements for the scheme, including how decisions are taken.

**6.43** The LINK Scheme has changed the way it is organised since we published our interim report. A new legal entity has been incorporated in order to be the operator of the scheme (Link Scheme Limited). Following extensive negotiation, contractual arrangements with VocaLink have been formalised on 1 April 2016, which enable the operational running of the new legal company separately from VocaLink. Following separation, the scheme now has two key governance organisations: the operator company, Link Scheme Limited (LSL), and the members' organisation, the Network Members Council (NMC).

**6.44** The LSL board manages on behalf of NMC all aspects of Link Scheme, including infrastructure procurement, the recruitment of the NMC Chairman and Link Scheme CEO, and the management of the LINK brand). The board is made up of four Independent non-executive directors (including the NMC Independent Chairman, also in the role of LSL Chairman), three Member non-executive directors representing the big banks, small banks and IADs respectively and an executive director (who is also the LINK Scheme CEO).

**6.45** Presently, the quorum for board meetings may be fixed from time to time by a decision of the directors but it is never less than two directors.

**6.46** Each director on the LSL board has a vote on the matters of the scheme. If the numbers of votes for and against a proposal are equal, the chairman of the meeting will have a second or casting vote. For members decision making in General Meetings, resolutions put to the vote are decided on a show of hands unless a poll is demanded. Every member who is present has one vote and decisions are passed by majority (unless a poll is demanded, in which case every member who is present has one vote for every share it holds).

**6.47** According to the LSL articles of association, directors are appointed onto the board of LSL by ordinary resolution or by a decision of the directors.[122] Although the board of LSL is responsible for managing the process for the recruitment of the LINK scheme CEO and NMC Chairman, their appointments are subject to approval by the NMC.

122 LSL, *Articles of association*, section 20.1.

**6.48** The directors may delegate any of their powers which are conferred to it under the company's articles to any person or committee as they think fit. The committees to which directors delegate any of their powers must follow procedures which are based, as far as they are applicable, on those provisions of the articles which govern the taking of decisions by directors. LSL contains a number of committees, including:

- an Audit Committee
- a Remuneration Committee
- the LINK Consumer Council

**6.49** Although the LSL board is responsible for running the procurement exercise to appoint the infrastructure provider for the scheme, the board's recommendation must be approved by 80% of the NMC before it can be confirmed.

**6.50** The NMC has the power to approve a number of matters set out in the SSA and MA, including Scheme Rules, interchange levels and membership fees. All 38 members of LINK Scheme are voting members of the NMC and can submit proposals. The NMC has an independent Chairman without voting rights. Each Member's voting entitlement on the NMC is included in the Members Agreement. That entitlement is adjusted annually on the basis of the number of LINK transactions made on the LINK Network during the preceding year. A total of 1,000 are allocated to members. Currently, 75% of the total votes are allocated on the basis of LINK transaction volumes; the remaining 25% of votes are divided equally among all the Members. Individual Member's votes are capped at 15% (RBS Group is capped in this way).

**6.51** All Rule decisions made on the NMC require a 60% majority of weighted votes to be passed. Other decisions, such as the appointment of the infrastructure provider for the scheme require an 80% majority on the NMC to be approved. This was noted in the Independent Governance Review where some network members expressed concern that the weighted voting arrangements on the NMC enabled the largest members (by transaction volume) to control the majority of decisions and vote on matters that do not affect them.

**6.52** We looked at the public minutes of the Link NMC between March 2015 and 2016 (to date). We found that the largest four VocaLink shareholder PSPs voted together on matters relating to security, stability and resilience or VocaLink's profitability. We found some instances of them voting differently on issues that were unrelated to such matters.

**6.53** The LSL has indicated that further changes to the current legal structure will be implemented during the course of 2016. The new governance arrangements for the scheme have been set following an Independent Governance Review led during 2015 by Lord Hunt. Whilst the recommendations of the Independent Governance Review have been accepted in full by LSL and NMC, several elements remain in the course of implementation. Already implemented is the new LSL board (as described above) which is now majority independent. The other key elements of the Independent Governance Review are still being developed, for instance, a requirement to set up Link Scheme Limited as a Company Limited by Guarantee (CLG). Eventually, LSL will become a fully owned subsidiary of CLG rather than closing down to avoid operational disruption. The current board of LSL will then become the board of CLG. We have based our analysis on current governance arrangements.

**6.54** Table 4 below shows the distribution of votes on the Link NMC for 2016.

***Table 4: Distribution of votes on the Link NMC***

| Link member | Share of votes on the Link NMC for 2016 (%) |
|---|---|
| Royal Bank of Scotland | [✂] |
| Lloyds Banking Group | [✂] |
| Barclays | [✂] |
| Cardtronics | [✂] |
| Santander | [✂] |
| HSBC Bank | [✂] |
| Note Machine | [✂] |
| Nationwide Building Society | [✂] |
| Bank of Ireland | [✂] |
| TSB Bank | [✂] |
| Sainsbury's Bank | [✂] |
| National Australia Group | [✂] |
| Co-operative Bank | [✂] |
| YourCash | [✂] |
| DC Payments UK | [✂] |
| PayPoint | [✂] |
| Northern Bank | [✂] |
| Raphaels Bank | [✂] |
| Allied Irish Bank | [✂] |
| Metro Bank | [✂] |
| Coventry Building Society | [✂] |
| Yorkshire Building Society | [✂] |
| Travelex | [✂] |
| Virgin Money | [✂] |
| Money Corp | [✂] |
| Cumberland Building Society | [✂] |
| Tesco Personal Finance | [✂] |
| Airdrie Savings Bank | [✂] |
| Citibank | [✂] |
| American Express | [✂] |
| Change Group | [✂] |
| G4S Cash Services | [✂] |
| Creation Financial Services | [✂] |
| Credit Mutuel | [✂] |
| Handelsbanken | [✂] |

*Source: LINK*
*Note: Lloyds Banking Group includes HBOS; RBSG includes Royal Bank of Scotland, Coutts & Co and NatWest; National Australia Group includes Clydesdale Bank and Yorkshire Bank; Northern Bank has been acquired by Danske Bank.*

### *Stakeholder views on VocaLink's and the operators' corporate governance*

**6.55** Three respondents noted that the current ownership structure could allow the largest shareholder PSPs to exercise control over the strategy and decision-making of VocaLink and the operators. One infrastructure provider told us that it considers the control that VocaLink's largest shareholders hold over Bacs, FPS and Link could inhibit our statutory objectives. They would therefore expect that a change in the current VocaLink ownership arrangements would increase competition in the provision of central infrastructure services. For LINK in particular, one IAD commented that retaining weighted voting at the NMC could result in shareholder PSPs using their control of the LINK scheme and VocaLink to block potential changes.

**6.56** However, two of the four largest shareholder PSPs and one operator disagreed with our interim analysis and conclusions on PSP control of VocaLink and the operators. Two of the four largest shareholder PSPs said that we had not explained how the largest shareholders of VocaLink have material influence, sole control or joint control (as defined by the Enterprise Act 2002 or the EC Merger Regulation[123]) over VocaLink.

**6.57** One of the four largest shareholder PSPs argued that, given their shareholding and voting powers on the boards of VocaLink, we have not demonstrated that they have sole control (or material influence). Another of the other four largest shareholder PSPs argued that the concept of joint control only exists in EC Merger Regulation and not the Enterprise Act 2002. They argued that the PSR had failed to demonstrate in its interim report that the group of five largest shareholder PSPs pass the common interest test necessary to conclude that there is joint control. They argued that there is no evidence of any collective voting by large shareholder PSPs, noting our acknowledgement that we had found no evidence of voting against the interest of other shareholders.

**6.58** They also argued, on the same basis, that the PSR had failed to set out in the interim report how each of the five largest shareholders of VocaLink have material influence, sole control or joint control over the operators.

**6.59** In addition, one of the four largest shareholder PSPs said we appeared to downplay the fiduciary duties of shareholder PSP nominated directors. It also pointed out that independent directors on the boards of Bacs and FPS have never exercised their public interest veto powers – which it said suggests that infrastructure procurement decisions have not been made in the interests of certain shareholders rather than the wider public interest. It argued that we had not taken into account the fact that one of the large shareholder PSPs voted against VocaLink being awarded the LINK contract. It also said we had not provided evidence (including shareholder voting records) to suggest that shareholders have pooled votes to influence scheme boards' decisions on infrastructure procurement. It cited an FPS director appointed by a shareholder PSP abstaining when the FPS board voted on appointing VocaLink as the infrastructure provider for the scheme. FPSL said this was due to this director's involvement in certain VocaLink committees.

**6.60** FPSL said our Interim Report had misunderstood their governance, adding to existing perceptions of big bank influence. They said this misunderstanding suggests that more significant changes to its governance arrangements may be needed so its independence from its users can be seen more clearly. Where relevant, we have amended the description of FPSL's governance.

## Our assessment of the corporate governance of VocaLink and the operators

**6.61** In this subsection we assess whether there is a group of PSPs that has control over VocaLink or any of the operators.

**6.62** We provided a summary above of the corporate governance of VocaLink and the operators.[124] We set out below our framework for determining whether there is control. We then assess, for VocaLink and each of the operators, whether there is a group of PSPs that has control over the respective organisation.

123 Council Regulation (EC) No 139/2004 of 20 (January 2004) on control of concentrations between undertakings: http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32004R0139&from=EN

124 Further detail on VocaLink's and the operators' governance arrangements can be found in Annex 2 and 3 respectively.

## Framework for assessing control

**6.63** The Enterprise Act 2002 defines 'control' as not limited to a shareholding conferring more than 50% of the voting rights (also known as 'legal control'), and may include situations that fall short of outright voting control. Section 26 distinguishes three levels of interest referred to as control (in ascending order):

a. The ability to materially influence the policy of a company (known as 'material influence').

b. The ability to control the policy of a company (known as 'de facto' control).

c. A controlling interest in a company (known as 'de jure', or 'legal' control).

**6.64** In our assessment of overall control, we consider that it is the ability to control that is relevant, rather than the actual exercise of control (or intention to exercise it). This is consistent with the approach the Competition and Markets Authority (CMA), and its predecessor, the Competition Commission (CC), has taken in assessing the jurisdictional question of control. For instance, in deciding whether a relevant merger situation had been created in the CC Ryan Air/Aer Lingus merger inquiry, part of the CC analysis involved investigating the 'ability' of Ryanair to materially influence policy relevant to the behaviour of Aer Lingus. In the Ryanair decision, the CC noted that 'the jurisdictional question [it] must decide is not whether Ryanair has in fact exercised material influence; we have to consider whether, on all the evidence available, Ryanair has the ability to exercise material influence'.[125]

**6.65** As part of the CC investigation into BSKYB's acquisition of 17.9% shares in ITV plc. The CC considered whether the acquisition had led to BSkyB acquiring the ability materially to influence the policy of ITV. In the BSkyB decision, the CC noted that 'the test that [it has] to apply in deciding whether a relevant merger situation had been created is whether the ability to exert material influence has arisen, not whether, in practice, that ability has been exploited'.[126]

**6.66** Moreover, we consider that a group of shareholders together having the ability to control a firm could have real effects on the governance of that company. This would be the case if there are identifiable areas in which these shareholders have a common interest. Such a common interest would make it likely that the shareholders in question would act in concert. We examine this issue in relation to VocaLink and the operators in sections that follow.

**6.67** For these purposes, we examine the ownership structure and corporate governance of both VocaLink and the operators to understand how decisions are made, who makes these decisions and who appoints decision makers. In particular, we are concerned with how the distribution of shareholding and membership (in the case of operators) may affect decision-making. As part of the assessment of control we consider the ability of the PSPs (or any group of them) to control the policy and operational decision making of each of the operators and VocaLink.

## VocaLink

**6.68** With respect to VocaLink, we find that that the four largest shareholders of VocaLink have the ability to block any reserved matters which are subject to a shareholder vote at general meetings. This is because the four largest PSPs control 77.6% of votes of the shareholders at general meetings if they vote collectively (as set out in paragraph 6.19).

125 Competition Commission, *Ryanair Holdings plc and Aer Lingus Group plc – A report on the completed acquisition by Ryanair Holdings plc of a minority shareholding in Aer Lingus Group plc* (2013), paragraph 4.10: https://assets.publishing.service.gov.uk/media/5329ddc8ed915d0e60000189/130828_ryanair_final_report.pdf

126 Competition Commission: *Acquisition by British Sky Broadcasting Group plc of 17.9 per cent of the shares in ITV plc* (2007), paragraph 3.65: http://webarchive.nationalarchives.gov.uk/20101227023510/http:/www.bis.gov.uk/policies/business-law/competition-matters/mergers/mergers-with-a-public-interest/broadcasting-and-cross-media-mergers

**6.69** We also find that the four largest VocaLink shareholder PSPs have significant influence on the VocaLink board. This is because they hold four of the twelve positions on a board where decisions are made by consensus (see paragraphs 6.23 and 6.25).

**6.70** We consider that the four largest VocaLink shareholders have aligned interests in terms of security and VocaLink's profitability. We set out below why their interests are aligned concerning security, resilience and reliability; we consider the PSPs' common interest in VocaLink's profitability at paragraphs 6.113 to 6.125.

**6.71** Significantly, and as mentioned in paragraph 6.29, one of the reserved matters that could be considered by the shareholders at a general meeting is any matter designated a reserved matter by the Operational Oversight Committee (OOC). The OOC is an influential committee responsible for maintaining contracted service levels and core service investment. The Committee has the power to escalate issues to the shareholders as a reserved matter if it considers that the board has acted unreasonably in not implementing its recommendation. As mentioned in paragraph 6.28, the majority of this Committee's members are representatives of the four largest VocaLink shareholders. The representatives of the four largest VocaLink shareholders therefore have the ability to control it, when acting together. Any recommendation brought forward to the shareholders by the OOC could be decided by the four largest shareholder PSPs, given that they control 77.6% of VocaLink's shareholders' votes.

**6.72** As such, we conclude that the four largest VocaLink shareholders control this Committee. In particular, they are able to exercise through this committee their interest in maintaining the security, stability and resilience of the service being provided (as set out in paragraphs 6.26 to 6.28).

**6.73** Their representation on the OOC demonstrates the importance that the shareholder PSPs attach to security, stability and resilience, including the investment required to allow VocaLink to re-tender the core services contracts when they expire. Their representation on the OOC indicates that the shareholder PSPs' interests are aligned in this respect.

**6.74** That the shareholder PSPs have common interest in security, stability and resilience is further supported by the arguments they have made in relation to the benefits that arise from their ownership of VocaLink. They have told us that this ownership contributes to aligning the incentives of VocaLink and the operators and PSPs, which they consider results in enhanced stability, security and resilience (see paragraph 6.130). It appears unlikely that there would be such an alignment unless the shareholder PSPs' interests were aligned in respect of the areas of stability, security and resilience. Moreover, an internal VocaLink document on an engagement strategy for the core contract renewal process noted that the 'nature of the payment scheme and VocaLink ownership structure meant that there was a high degree of commonality of interest'.

**6.75** While we recognise the importance of maintaining stability, security and resilience, as set out in paragraphs 6.141 to 6.142, this also makes PSPs and operators unwilling to turn to suppliers other than VocaLink.

**6.76** We consider that it is likely that the four largest VocaLink shareholder PSPs would act in concert in matters where they have a common interest. As a consequence, we consider that these PSPs will tend to act jointly in questions that are relevant to these matters. For the reasons set out in paragraph 6.66 we therefore consider that the shareholder PSPs have control of VocaLink in these matters. As set out in paragraph 6.22 VocaLink shareholder meeting voting records we examined are consistent with our view that these PSPs are to likely act jointly in these matters.

### *Bacs Payment Schemes Limited*

**6.77** We find that the four largest VocaLink shareholder PSPs have control over BPSL.

**6.78** The largest four VocaLink shareholder PSPs collectively have 84.4% of the votes on the BPSL board (as set out in paragraph 6.36), meaning that they can get over the 75% threshold for board decisions to be passed if they vote collectively. They can also block any decision.

**6.79** For the reasons set out in relation to VocaLink, at paragraphs 6.70 to 6.76 above, we find that the largest four VocaLink shareholder PSPs' interests are aligned, at least in certain matters. We consider it likely that these PSPs will act jointly on the BPSL board in questions that are relevant to these matters. As set out in paragraph 6.35 BPSL voting records we examined are consistent with our view that these PSPs are likely to act jointly in these matters. For the reasons set out in paragraph 6.66 we therefore consider that the VocaLink's four largest shareholder PSPs have control over BPSL in these matters.

**6.80** The voting power of the four largest VocaLink shareholder PSPs means that they have the ability to control decisions regarding the appointment of the central infrastructure provider for the Bacs payment system.

**6.81** One VocaLink shareholder argued that the independent directors never having exercised their public veto powers suggests that infrastructure procurement decisions have not been made in the interests of certain shareholders rather than the wider public interest (see paragraph 6.59). We note that a matter of public interest is 'a matter concerning the Company, the Payment System and the payments industry for the long term benefit of the UK, its citizens and businesses as a whole, with particular emphasis on customer needs, competition, innovation, reducing barriers to entry in the payments industry and limiting systemic risk' (see paragraph 6.34). The independent directors' public interest duties are not defined in any more detail than this. These duties appear to involve considerable scope for directors' judgement. For this reason, we do not attach much weight to the presence of the public interest duties as such. Nor do we attach much weight to the alleged fact that the public interest veto has not been exercised.

**6.82** In relation to the argument that we have downplayed the relevance of fiduciary duties (see paragraph 6.59), we acknowledge that directors of companies (including shareholders and independent non-executive directors) are subject to director's duties as set out in the Companies Act 2006.[127] We do not consider this alters our analysis of control. We note this approach is consistent with the approach taken in relation to analysing joint control under the EC Merger Regulation.[128]

### *Faster Payments Scheme Limited*

**6.83** Each director of the FPSL board has one vote. However, a decision will only be passed if it has the majority backing of 75% of the directors present at the meeting, provided that this 75% majority group are responsible for at least 50% of the clearing volumes for the scheme. Therefore for a meeting to be quorate there need to be directors present representing 50% of clearing volumes. The largest four VocaLink shareholder PSPs between them have [✂] of FPS clearing volumes. Therefore the remaining directors together cannot pass a decision without the support of some of these VocaLink shareholder PSPs.

**6.84** As there are 14 voting directors on the FPSL board, assuming all are present, a 75% majority means resolutions need to be backed by 11 directors provided that this group of directors have at least 50% of the clearing volumes between them. Therefore, if the four largest shareholder PSPs vote together against a resolution it cannot pass.

**6.85** For the reasons set out in relation to VocaLink, at paragraphs 6.70 to 6.76 above, we find that the largest four VocaLink shareholder PSPs' interests are aligned in certain matters. We consider it likely that these PSPs will act jointly on the FPSL board in questions that are relevant to these matters.

127 Companies Act 2006, sections 170-177: http://www.legislation.gov.uk/ukpga/2006/46/contents

128 Paragraph 22 of Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings and Judgment in Case T-282/02 Cementbouw v Commission, paragraphs 79 [2006] ECR II-319: http://curia.europa.eu/juris/showPdf.jsf;jsessionid=9ea7d0f130d5542d539169f4401e9967c678bdaf72f0.e34KaxiLc3eQc40LaxqMbN4Pa3eOe0?text=&docid=56207&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=540157

As set out in paragraph 6.41, all FPSL board decisions have been unanimously agreed without a need for a vote, with one exception, which we consider to be consistent with our view that these PSPs are likely to act jointly in these matters. For the reasons set out in paragraph 6.66 we therefore consider that the four largest shareholder PSPs have control over FPSL in these matters.

**6.86** For the same reasons as in relation to Bacs (see paragraph 6.81), we do not attach much weight to the presence of the public interest duties as such. Nor do we attach much weight to the alleged fact that the public interest veto has not been exercised.

### *The Link Scheme Limited*

**6.87** Following the separation of LINK from VocaLink and the adoption of some of the recommendations of the Independent Governance Review, the direct influence of the largest shareholder PSPs of VocaLink on the LSL board is limited. This is because the majority of the LSL board is now formed by independent directors and member executive directors represent the interests of the three member groups (big banks, small banks and IADs).

**6.88** However, certain key decisions made by the board (for example, on infrastructure procurement) need to be approved by the NMC where the weighted voting system has been retained following separation.

**6.89** As set out in paragraph 6.51, all Rule decisions made on the NMC require a 60% majority of weighted votes to be passed. Other decisions, such as the appointment of the infrastructure provider for the scheme require an 80% majority on the NMC to be approved. The four largest VocaLink shareholders have about 45% of the votes on the NMC (as set out in paragraph 6.54). This means that they can use their votes to prevent other NMC members from reaching the majority required to make decisions. This gives the four largest shareholder PSPs the ability to block proposals from being passed by the NMC.

**6.90** [✂].

**6.91** For the reasons set out in relation to VocaLink, we find that the largest four shareholder PSPs' interests are aligned in certain matters. We consider it likely that these PSPs will tend to act jointly on the Link NMC board in questions that are relevant to these matters. As set out in paragraph 6.52 Link NMC voting records we examined are consistent with our view that these PSPs are likely to act jointly in these matters. For the reasons set out in paragraph 6.66 we therefore consider that the shareholder PSPs have control over Link in these matters.

**6.92** We note that the governance arrangements for the scheme will be undergoing further change in the future, as set out at paragraph 6.53 above. The new governance has not been established and we have therefore based our analysis on the currently prevailing situation.

### *Summary of our assessment of control*

**6.93** We find that that the four largest shareholders in VocaLink, when acting collectively, have the ability to take (or block) key decisions. This applies to VocaLink and all three operators. We also find that the four largest shareholders' interests are aligned in matters concerning stability, security and resilience (and in relation to protecting VocaLink from competition, which is explored at paragraphs 6.119 and 6.120 below). We therefore consider that the four largest VocaLink shareholder PSPs would tend to act in concert in relation to these matters, in which they have a common interest.

**6.94** We recognise that the commonality of interests we refer to, in particular stability, security and resilience, could go beyond the largest four VocaLink shareholders on which our analysis focuses. Similarly, there are other large PSPs who are shareholders of VocaLink and represented on the operators' governing bodies. However, we consider it appropriate to focus our finding of control on the large four VocaLink shareholders given the relative significance of the large four both in terms of the size of their shareholding in VocaLink and in relation to their voting rights on the operators. The smaller PSPs are not as significantly represented on the governance bodies of VocaLink and have less significant voting rights on the operators. As set out above, these factors give the four largest VocaLink shareholders the ability, without recourse to other parties, to together take (or block) decisions of the operators and VocaLink. Further, we consider the evidence is more mixed on the extent to which PSPs outside this group have tended to vote in a concerted manner in matters that relate to their common interests.

## Protecting VocaLink from competition

**6.95** This section considers whether the four largest VocaLink shareholder PSPs have a common interest to protect VocaLink from competition. As set out above, the largest four VocaLink shareholders' have the ability to compel the operators to take (or block) decisions when acting together. This gives them the ability to protect VocaLink from competition if they act together.

**6.96** We also assess whether the current ownership arrangements put VocaLink in a situation where it can protect itself, or try to protect itself, from competition using the links between its owners and the operators, its key customers.

**6.97** The VocaLink shareholder PSPs could protect VocaLink directly, by favouring it in any procurement, or indirectly, by maintaining the current situation (for example, by preventing initiatives to test the market or run competitive procurements).

**6.98** We first set out stakeholder views on whether VocaLink's owners have an incentive to protect it from competition. We then present other evidence that is relevant to the question. Finally, we set out our assessment of whether VocaLink's owners have the incentive to protect it from competition.

### *Stakeholder views*

**6.99** In response to our interim report, three of the four largest VocaLink shareholder PSPs did not agree that shareholder PSPs have an incentive to protect VocaLink from competition, outlining that shareholder PSPs derive no financial benefit from their ownership of VocaLink despite injecting capital into the business in the past.

**6.100** One of the four largest VocaLink shareholder PSPs explained that VocaLink shareholder PSPs having an incentive to protect VocaLink from competition is inconsistent with the fact that shareholders have never received a dividend and have had to recapitalise VocaLink a number of times in the past. It also pointed to several decisions which it considered were inconsistent with the owners having control over schemes and an incentive to protect VocaLink: (i) a scheme awarding a recent procurement contract to an infrastructure provider other than VocaLink; (ii) schemes negotiating discounts or higher investments for existing services currently provided by VocaLink; (iii) schemes using alternative providers for European clearing; (iv)the Link Scheme undertaking a competitive tender which led to VocaLink agreeing to lower prices and higher SLAs; and (v) inviting other providers to bid for the Cash ISA service. We consider these arguments at paragraphs 6.116 and 6.117.

**6.101** Another of the four largest shareholder PSPs explained that VocaLink's owners cannot be profiting from their ownership of VocaLink because the investments they have made are sunk and cannot be recovered regardless of whether VocaLink is the provider of infrastructure services. It added that they do not receive any dividends and stand to lose if something goes wrong as they effectively have unlimited liability. Another of the four largest shareholder PSPs cites the PSR finding that it did not uncover evidence that shareholders benefit from the current ownership arrangements.

**6.102** Two of the four largest shareholder PSPs explained that they have no strategic imperative to own shares in VocaLink.

### *Other evidence*

**6.103** We first set out evidence relating to the shareholders' incentives to protect VocaLink from competition. We then set out the evidence we have seen that is informative of VocaLink using the links between its owners and the operators (its key customers) to protect itself.

**6.104** Our analysis of VocaLink's financial performance showed different levels of positive and negative profitability. [✂].

**6.105** VocaLink's internal strategic documents refer to the company's dependence on profits and revenues related to the provision of core services for Bacs, FPS and LINK. In particular, VocaLink is heavily reliant on the revenue it receives from the [✂]. According to one of VocaLink's internal documents, VocaLink's failure to get contract extensions, particularly for [✂], could have a significant effect [✂]. The document notes that [✂]. This same document also suggests that the loss of the [✂] would reduce VocaLink's overall revenues [✂].

**6.106** These concerns were echoed at board level, [✂].

**6.107** Another example of this is when, [✂].

**6.108** There is evidence that suggests that VocaLink has attempted to protect its position using the links between its owners and the operators. VocaLink made these attempts while core contracts were being renewed. As set out above, the renewal of contracts had implications for VocaLink's funding. Renewal of core contracts mattered to shareholders, as it affected the risk of them facing calls for additional capital in future. For example, [✂]. This discussion highlights how important it was to the shareholder PSPs that VocaLink secured the renewal of the core contracts to reduce the probability of the company having to approach them in the future for additional capital injections.

**6.109** In this regard, we note that:

- During a board discussion of VocaLink's contract renewal strategy for Bacs and FPS, VocaLink's strategy was 'to gain in principle agreement from the key shareholder banks and scheme companies on the broad commercial structure of a contract renewal'. Board minutes also state that 'it was key to the core contract renewal strategy to understand who were the key influencers and decision makers within each of the six largest banks.' VocaLink board directors agreed to provide this information to the Company Secretary following the meeting.

- Later in the same contract renewal negotiations the VocaLink board agreed that the shareholder PSP appointed directors would 'directly engage with their organisations' appointed representatives to FPSL and BPSL to escalate the delays being experienced with contract renewal.

**6.110** Both of these examples illustrate how important the VocaLink board believed the shareholder PSPs were, both individually and as operator representatives, with respect to central infrastructure procurement decisions. This implies VocaLink believes that the large shareholder PSPs are able to exert significant influence over the decisions of the operators.

**6.111** There is also evidence to suggest that shareholder PSP influence also extends to other significant aspects of procurement decisions. For example, as part of the initial negotiation for core infrastructure services, BPSL requested VocaLink to introduce an ISO 20022 translations component when responding to BPSL's RFP. VocaLink considered at the time that a move to ISO 20022 would reduce the protection afforded to VocaLink as the unique supplier of payment services using UK specific standards. VocaLink was at the same time aware that such a change was seen as advantageous by certain government departments. To avoid implementing an ISO 20022 solution, the VocaLink board agreed to escalate the issue within the PSPs and the Payments Council where its shareholders have an influence. VocaLink did not offer an ISO 20022 capability as part of its response to BPSL's RFP and an ISO 20022 component was not implemented. This is consistent with VocaLink, through the influence of shareholder PSPs, preventing BPSL from introducing innovative changes that would have had wider benefits for some service-users.

**6.112** In addition, during an update to the VocaLink board on discussions with the LINK scheme executive to set the scheme up as a separate legal entity from VocaLink, the [✂] expressed concern that if [✂] 'it would be free to change its governance model to the detriment of the banks'. In response, the board was updated that VocaLink were lobbying the PSP representatives on the Link NMC to block the proposals. This is another example of VocaLink and its shareholder PSPs using their influence to prevent decisions being taken by the operators that would go against their interests.

***Our assessment***

**6.113** We find that the largest four VocaLink shareholder PSPs have an incentive to protect VocaLink from competition.

**6.114** The VocaLink shareholders' incentive to protect VocaLink from competition arises from the financial importance of some infrastructure contracts. [✂]. This is consistent with our analysis of VocaLink's profitability (see paragraph 4.96). We also have evidence showing that VocaLink has attempted to use the links between its owners and the operators, its key customers, to protect its position (see paragraphs 6.108 to 6.110 above).

**6.115** The importance of protecting VocaLink from competition is likely to differ between infrastructure contracts. [✂].

**6.116** In response to some of the arguments set out at paragraph 6.100 above, we do not think it is clear that it would be in the shareholder PSPs' interest that VocaLink win every other contract for infrastructure. It is not clear, and would likely be difficult to determine with certainty, how profitable the cheque imaging, European clearing, and the Cash ISA service contracts could have been to VocaLink. Therefore, it is not possible to conclude that winning these contracts was in the shareholders' interest. The award of these contracts to suppliers other than VocaLink is therefore not inconsistent with the shareholder PSPs having an incentive to protect VocaLink, in particular as regards Bacs and FPS, and we therefore do not attach much weight to this.

**6.117** Similarly, the fact that VocaLink decreased its prices (or increased investment) following the contract renewals process for the Bacs and FPS contracts, as well as following the LINK RFI process, is consistent with the finding that VocaLink's owners are trying to protect it from competition. The value of these contracts to VocaLink depends on a range of factors in addition to prices and investments. We note that the contracts also changed in ways that were beneficial to VocaLink. For instance, in exchange for an extended contract term from 2018 to 2020, VocaLink made a number of concessions during its negotiations with BPSL, including a price cut for the service. Although a lower price was agreed, BPSL said this was not the key driver or aimed for outcome of its negotiations. One of the benefits to VocaLink of the extended contract included [✂]. For LINK, in exchange for some of the concessions provided, VocaLink was able to secure some benefits relating to [✂]. It would be difficult to determine with certainty how the changes affected the net value of the contracts to VocaLink. We therefore do not attach much weight to this.

**6.118** We acknowledge that shareholder PSPs have not received any dividends from VocaLink. However, this does not necessarily mean that VocaLink's shareholder PSPs lack a financial incentive to protect VocaLink from competition. As VocaLink makes profits and as those profits are reinvested back into the business (rather than paid out as dividends) VocaLink's net assets position will improve, making the company more valuable. This additional value could then be realised by a shareholder when it sells its shares at some point in the future. We have evidence which shows that the company shares have a positive value. Moreover, although the company's current policy is to not pay out dividends to shareholders, this position could be reversed by the VocaLink board at some point in the future. Finally, the shareholders benefit from VocaLink becoming less likely to approach them for capital in future.

**6.119** All four largest shareholder PSPs are likely to face the same, or similar, incentives to protect VocaLink:

- [✂]. For the reasons we set out in paragraph 6.74, these are concerns that are likely to be shared by the large PSPs. [✂].
- Concerns about the financial value of VocaLink are also likely to be shared by all large VocaLink shareholder PSPs, as these are for-profit organisations. This would likely be true at least for decisions which would have a material and unequivocal effect on the value of the firm, such as the loss of a core contract. PSPs could potentially attach different value to improved downstream services arising from a change of supplier. This could in turn lead a PSP that attaches a large value to such improvements to find that these benefits outweigh the financial gain of protecting VocaLink. For the reasons we set out at paragraph 4.82 in Chapter 4, we consider it unlikely that any of the large PSPs would attach much value to such improvements.

**6.120** Therefore we find that the four largest PSPs have a common interest in protecting VocaLink from competition in relation to the provision of core infrastructure services to Bacs, FPS and LINK. While it is plausible that smaller shareholders in VocaLink also have an interest in protecting VocaLink from competition, we believe that the four largest shareholders will have a stronger interest in doing so. This is due to the relative significance of the largest four PSPs in terms of the size of their shareholding in VocaLink.

**6.121** VocaLink's board is willing to use the shareholder PSPs' influence over operators to protect the value of VocaLink. For instance, in considering proposals from the LINK scheme executive to establish a new incorporated entity for the LINK scheme [✂] of VocaLink explained to the board that the proposal was not in the company's interest [✂]. Consequently, the CEO was empowered to respond to the LINK scheme executive on behalf of the board to convey its disapproval of the plans. In addition, VocaLink lobbied PSP representatives on the LINK Network Members Council to convey that the proposals were not in the best interests of the company, its shareholders or the members of the LINK scheme.

**6.122** VocaLink's attempts to use the links between its owners and the operators to protect its position potentially exacerbate the owners' incentives to protect VocaLink from competition. VocaLink's' behaviour in response to Bacs introducing the implementation of ISO 20022 as part of contract renewal negotiations is particularly noteworthy. As we have noted in paragraph 4.271, VocaLink viewed the introduction of ISO 20022 as a change that would reduce rival suppliers' barriers to supplying infrastructure services to UK operators. VocaLink's behaviour could therefore contribute to maintaining barriers to entry in infrastructure services.

**6.123** In summary, we find that VocaLink's four largest shareholders have an incentive to protect it from competition. This incentive arises because:

- [✂].
- [✂].
- The value of the company in terms of its assets and share price would also be negatively affected. In particular, VocaLink's shareholders could become liable for additional capital calls to support the company.

**6.124** As they have a common interest in protecting VocaLink from competition, they are likely to act together in matters that are related to exposing VocaLink to competition. For the reasons set out at paragraph 6.76 we therefore find that the four largest VocaLink shareholders control the operators and VocaLink in relation to matters related to exposing VocaLink to competition. This gives them the ability to protect VocaLink from competition.

**6.125** We note that it is not the case that core infrastructure services for Bacs, FPS and LINK must be provided by the same infrastructure provider. As set out in Chapter 4 (paragraph 4.6, for example), there are potential entrants to the UK market that could leverage economies of scale or scope from providing services elsewhere. [✂] [✂] is also a function of the way in which the provision of these services has been implemented. As set out in paragraph 4.5, there are economies of scope across the schemes with a large proportion, [✂], of running costs shared between the systems. If VocaLink were to lose the contract for a scheme, its costs would therefore not decrease in proportion to the lost revenue.

## Perceived benefits and drawbacks of current arrangements and their impact on competition

**6.126** It is possible that the current ownership arrangements could produce benefits. In this section we first set out stakeholder views on whether that is the case, and what might be the nature of any such benefits.

**6.127** We similarly set out stakeholder views on whether the current ownership arrangements may produce drawbacks (to the extent these views have not been covered in other sections). We then set out our assessment of those alleged drawbacks. However, the purpose of this section is not to undertake an assessment of the relative benefits and drawbacks of the current arrangement, as compared with any alternative; we will take such factors into account as part of any further remedies work in due course in relation to any proposed divestment remedy.

**6.128** We set out our finding that the largest four VocaLink shareholder PSPs are unwilling to turn to infrastructure suppliers other than VocaLink because they perceive there is a benefit of using a supplier they control. They see their ownership and influence over VocaLink as a way of ensuring stable, secure and resilient services. Their control of the operators in these matters allows them to ensure that VocaLink continues to be the supplier.

### *Stakeholder views: benefits of current arrangements*

**6.129** A broad range of stakeholders, including shareholder PSPs, non-shareholder PSPs, one IAD, the operators and VocaLink itself, emphasised the quality of service and resilience benefits of the current ownership arrangements.

**6.130** A number of PSPs, including the largest four shareholders of VocaLink and other non-shareholders, said that the current ownership arrangements enhance stability, security and resilience. The majority of these stakeholders attributed these benefits to the alignment of incentives between VocaLink and its users, explaining how this is facilitated by owners of VocaLink also being its users.

**6.131** A majority of PSPs expressed a positive view of VocaLink's quality of service. Each of the four largest VocaLink shareholder PSPs mentioned the high level of service availability provided by VocaLink. Data submitted by the operators confirms that VocaLink exceeded its availability SLAs across all three payment systems over the period July 2014 to July 2015.

**6.132** All of the operators, including three of the four largest shareholder PSPs and two other shareholder PSPs, said that common ownership and aligned interests provided an implicit guarantee which in turn gave operators and end users confidence that the service would be stable, continuous and resilient. To be reassured of the continuity of service, one of the operators also said that without the implicit guarantee from common ownership, they would have required VocaLink to have specific reserves and other financial guarantees before awarding it the contract. Two of the operators explain that these arrangements benefit end users: without the implicit guarantee, the costs of the service to end users would have increased (because these costs would have been passed on to end users).

**6.133** VocaLink, one shareholder PSP and one non-shareholder PSP said that given the shared interest in resilience across all of their customers, non-shareholding banks have benefitted from the financial capability of the shareholder PSPs to invest without taking a return. Two non-shareholder PSP said that independent owners might focus on profit to the detriment of system-wide integrity or value for money.

**6.134** Another infrastructure provider told us that the current approach allows the build-up of capital to cover central innovation projects with minimal administrative overheads, compared to having to set up new administration for each new central innovation. It also told us that under other ownership arrangements, VocaLink might adopt an administratively onerous regime to manage returns on capital.

**6.135** Many shareholder PSPs said that, in principle, they would not rule out alternative ownership models for VocaLink, but they would need strong reassurance that the interests of the new owners remain aligned with those of its users, especially in terms of stability, security and resilience. One of the four largest shareholder PSPs mentioned that contractual obligations would need to be in place to ensure that the system continues to be as robust as it is now. An operator commented that, if VocaLink's ownership were transferred, it would want to increase VocaLink's financial obligations (such as liability and indemnity insurance requirements). The operator explained that the current requirements are only acceptable because of the overlap of ownership of VocaLink and the operators. An IAD said that it opposed independent private ownership of VocaLink because security and reliability might be compromised.

**6.136** One of the four largest shareholder PSPs told us that a core infrastructure provider can run into financial difficulties for a range of reasons, and this can put the core infrastructure at risk.

**6.137** One of the four largest shareholder PSPs and a non-shareholder PSP said that under the current ownership structure, owner PSPs have had the incentive and ability to recapitalise VocaLink. The former also added that it is unclear if a third party owner would:

- have the same incentives and ability to recapitalise VocaLink
- be able to recapitalise the provider quickly enough

**6.138** One of the four largest shareholder PSPs told us that whether and how quickly VocaLink could be recapitalised depends on 'the nature of any contractual commitments made by the new owner, and the robustness with which those can be enforced'. It also set out a list of factors that a complete contract between a scheme and an infrastructure operator would have to anticipate fully.

**6.139** One of the four largest shareholder PSPs gave three examples of providers of construction services (Metronet Rail), rail services (National Express) and air traffic control services (National Air Traffic Services) that had allegedly run into financial difficulties (and in one instance failed) and had to be recapitalised.

**6.140** One PSP explained that the interim report did not address how the core systems should be protected in the event that the infrastructure provider gets into financial difficulty. It said such an event could threaten both the operation of the core services and investment in innovation. It explained that, regardless of ownership, rules and procedures to protect the infrastructure are critical as stability and continuity of supply are a major concern for customers. It said that such rules and procedures to address this risk – such as a special administration regime – are common in other sectors of critical infrastructure, for example energy and water networks. It noted that VocaLink has required recapitalisation on previous occasions and that there is no mechanism guaranteeing that such recapitalisations would happen in the future, who would provide funds and at what timescale.

### *Our assessment: impact of benefits of current arrangements on competition*

**6.141** Most stakeholders (especially shareholders) have identified the alignment of incentives between VocaLink, operators and owner PSPs as a strength. In particular, all shareholder PSPs consider that the current ownership arrangements produce benefits in relation to stability, security and resilience.

**6.142** We acknowledge that there could be such benefits. However, in practice, the current ownership arrangements for VocaLink are likely to reduce the four largest shareholder PSPs' willingness to allow operators to turn to infrastructure suppliers other than VocaLink. All of the four largest shareholder PSPs have indicated that they consider that their ownership of VocaLink produces benefits in relation to stability, security and resilience (see paragraph 6.130). This is likely to reduce the shareholder PSPs' willingness to allow operators to procure infrastructure services competitively. Due to the control that the shareholder PSPs have over Bacs, FPS and Link, they also collectively have the ability to prevent the operators from turning to suppliers other than VocaLink. By not procuring services competitively, the operators forego the full ongoing benefits of competition.

**6.143** We are required to have regard to the importance of maintaining the stability of, and confidence in, the UK financial system when discharging our general duties and we work closely with the Bank of England in doing so. As we acknowledge in the previous paragraph, the current ownership arrangements have the potential to generate some benefits in particular in relation to stability. However, we consider that at least a corresponding level of stability could potentially be achieved by use of the other means as set out below.

**6.144** We note that the current ownership arrangement between VocaLink's owners and its users is only one element through which a high quality, stable service can be delivered. There are other things that can help achieve this outcome, such as regulatory supervision. Under the Banking Act 2009[129], the Bank of England has regard to the CPMI-IOSCO Principles for financial market infrastructures). The operators of Bacs, FPS and LINK are required to disclose a summary of their self-assessments against these principles. Under Principle 17, BPSL, FPSL and LINK are required to identify plausible sources of operational risk; both internal and external. They also mitigate their impact through the use of appropriate systems, policies, procedures, and controls. The goal of this principle is to ensure a high degree of security and operational reliability.[130] Principle 17 should underpin the delivery of a high quality of service by operators to PSPs, regardless of the outsourced provider's owner.

**6.145** Other methods of delivering a high quality, stable service include mechanisms that can address problems arising from incomplete contracts, for instance by developing better contract specifications, and suppliers' desire to protect their reputation.[131] There is evidence that supplier reputation matters in the supply of infrastructure services. For example, as part of the process for renewing the core contract for FPS, in our view VocaLink attached significant importance to concluding negotiations with the scheme operators quickly by the end of 2013 to avoid damaging its reputational standing. VocaLink viewed a prolonged negotiation as a reputational risk because [✂] VocaLink have also told us that they have legally binding SLAs and have to continue running the services at the current high level otherwise their reputation could be negatively affected.

**6.146** In addition, we acknowledge that the implementation of a special administration regime or other processes could help to mitigate the risk of a provider entering financial difficulties. We note that the Financial Services (Banking Reform) Act 2013 introduced a special administration regime for payment systems to deal with the systemic risk to financial stability caused by the failure of these systems, although the relevant legislative provisions are not yet active.

**6.147** It is not clear to us that the current ownership arrangements produce the right balance between the benefits of ongoing competition and the perceived risks to security, stability and resilience that could

129 LINK became a recognised payment system on 23 May 2016.

130 CPSS-IOSCO, *Principles for financial market infrastructures*, (April 2012), page 94: http://www.bis.org/cpmi/publ/d101a.pdf

131 Specifically, reputational concerns can compel a supplier to honour financial promises that are not legally enforceable. Cf. Boot, Greenbaum and Thakor (1993), *Reputation and Discretion in Financial Contracting*, The American Economic Review, Vol. 83(5), pp. 1165-1183: https://apps.olin.wustl.edu/workingpapers/pdf/2004-02-136.pdf

arise from competition in the supply of core infrastructure. We found in Chapter 4 that the operators and PSPs do not have a strong incentive to drive, or encourage, effective competition (see paragraphs 4.81 to 4.85). Therefore, we find that the operators are likely to attach much weight to security and resilience, and little weight to the benefits of ongoing competition and they are therefore unwilling to turn to infrastructure suppliers other than VocaLink.

**6.148** In summary, we find that the four largest VocaLink shareholders are unwilling to turn to infrastructure suppliers other than VocaLink as they perceive there is a benefit of using a supplier they control. They see their ownership and influence over VocaLink as a way of ensuring stable, secure and resilient services. Their control of the operators in these matters allows them to ensure that VocaLink continues to be the supplier.

### *Stakeholder views: drawbacks of current arrangements*

**6.149** Stakeholders identified drawbacks of the current ownership arrangements. These related to conflicts of interest and barriers to entry, non-shareholders having little influence over VocaLink, funding and innovation and the potential risk of VocaLink restricting competition between the schemes it provides services to.

**6.150** In relation to conflicts of interest and barriers to entry, one non-shareholder PSP and one infrastructure provider outlined that rival infrastructure providers, gateway suppliers and aggregators will find it difficult to bid for services due to conflicts of interests. The PSP emphasised the need for VocaLink to be independently run with diverse and autonomous directors. One shareholder PSP told us that the current arrangements could create inertia because the large owner banks, as the principal users of payment systems, may have an interest in maintaining these arrangements.

**6.151** A shareholder PSP noted that although they do not believe that the current governance structure of VocaLink has produced detriments, they recognise the perception of the need for change. In addition to this, one shareholder PSP, one non-shareholder PSP and one infrastructure provider said that a change in ownership could result in improvements in perceptions about VocaLink's willingness to invest and innovate.

**6.152** One IAD commented that common shareholdings in VocaLink and those controlling the LINK scheme can and may produce a conflict of interest.

**6.153** In relation to non-shareholders having little influence over VocaLink, one indirect PSP commented that, under the current structure, it has no influence on key areas such as pricing and membership. It also said it had to use a system that is effectively owned and governed by its competitors. Similarly, a small shareholder PSP said it doesn't believe it has a tangible influence on VocaLink's strategy as it is not on the board.

**6.154** A technology provider said that including non-banks in VocaLink's ownership would increase VocaLink's incentives to improve its service provision, offer additional value-added services and be more responsive to end user needs.

**6.155** One operator told us that common ownership could sometimes lead to conflicts because a decision that is right for VocaLink is not necessarily right for all members of the scheme.

**6.156** In relation to funding and innovation, one small shareholder PSP commented that innovation and investment can be stifled by the need for multiple owners to collaborate to deliver change.

**6.157** An alternative provider of central infrastructure services said it had benefited from its own change of ownership as it is now able to expand into areas its previous bank owners would not have supported. Another alternative provider of central infrastructure services explained that banks' ability to fund projects may be constrained given normal competing commercial funding demands and the fact that payment services are not a priority for owner banks.

**6.158** One shareholder PSP told us that VocaLink's owners have to continually invest in the company as there is little external funding available to run the service or offer new innovative products. One of the four largest shareholder PSPs explained that VocaLink's owners are ultimately liable for the continuity of VocaLink's critical national payments infrastructure – which essentially means that they have unlimited liability for the Bacs, FPS and LINK payment engines.

**6.159** In relation to competition between schemes, one stakeholder commented that VocaLink's ownership of the infrastructure for the three interbank operators has the potential to limit competition and innovation between the systems where it would reduce VocaLink's overall return. This stakeholder was also keen to ensure that VocaLink was focused on the success of each of the schemes by giving them equal priority.

### *Our views: drawbacks of current arrangements*

**6.160** In relation to conflicts of interest and barriers to entry, we note the stakeholders' comments. We assess whether ownership constitutes a barrier to entry at paragraphs 6.180 to 6.187 below.

**6.161** In relation to concerns over lack of influence of smaller PSPs over VocaLink, it is not clear this arises from the current ownership arrangements. We note that it is normally the case that a customer will influence a supplier only through any bargaining power it wields. It is not normally the case that customers influence suppliers through board representation. Therefore, that some customers lack board representation is not in itself a sign that competition is not working properly.

**6.162** Some small PSPs', in particular non-shareholder PSPs, interests not being represented at the board level could however still be a problem. If we had seen evidence of the VocaLink board taking decisions that run counter to the needs of non-shareholder PSPs we might have been minded to reach the conclusion that this lack of representation is a drawback of the current arrangements. We have however not seen any such evidence. In particular, the PSPs that raise these concerns have not pointed to any examples of such board decisions. For this reason, we cannot with sufficient confidence attribute to the current ownership structure any differences between PSPs' degree of influence over VocaLink purely as customers (aside from the control over operators discussed above).

**6.163** In relation to funding and innovation, we note the following: for the purpose of this market review we are ultimately concerned only with how the current arrangements affect VocaLink's provision of services for UK payments systems. We are not concerned with the commercial success of VocaLink more widely.

**6.164** In particular, if the current ownership arrangements restrict VocaLink's ability to raise capital and launch new innovations, those restrictions are relevant only to the extent they apply to UK payments systems. In any event, the evidence we have reviewed does not lead us to conclude that the current arrangements prevent VocaLink from access to capital. We note that VocaLink has been seeking external financing. While bringing in external capital requires a degree of support from the current owners, the documents we have seen suggest that current owners are [✂]. Moreover, the evidence we have seen does not suggest that lack of funding is having an adverse effect on the reliability of UK payment systems. Neither does that evidence suggest that VocaLink's access to funding is having an adverse impact on the adoption of innovations in UK payment systems. We therefore do not conclude that the current ownership arrangements adversely affect VocaLink's access to funding in a way that has a relevant effect.

**6.165** While it may be true that VocaLink's owners have historically invested in the company, we understand that VocaLink has a policy of not paying dividends (see paragraphs 6.100 to 6.101. This would reduce the need for the owners to provide additional capital. The policy of not paying dividends would also reduce the risk that the owners face a situation where they have to provide additional capital to keep VocaLink operating.

**6.166** As for the contention that VocaLink, as the infrastructure operator of Bacs, FPS and Link, is in a position to limit competition between these schemes we note the following: VocaLink could have the incentive to increase prices, reduce investment or reduce the quality of its service for one or several systems if those systems were sufficiently close substitutes for end users. For the reasons we set out at paragraph 4.18 in Chapter 4, we are not convinced that this would be the case.

## Ownership deters entry of rival suppliers

**6.167** In this section we set out our analysis of whether current ownership arrangements deter suppliers from entering the UK market. We first set out stakeholder views on this question. We then present some evidence based on our review of VocaLink's board minutes and other documents provided to us. We then present our assessment of whether the current ownership arrangements deter suppliers from entering the UK market.

### *Stakeholder views*

**6.168** Potential providers had mixed views about whether the vertical ownership arrangement of VocaLink is a barrier to entry. As set out below, some potential central infrastructure providers consider they would be at a competitive disadvantage against VocaLink. This is because they believe its shareholder PSPs, which also own and control the operators, would always select VocaLink to be the provider in a procurement exercise.

**6.169** Four providers thought they would be at a competitive disadvantage against VocaLink because its shareholder PSPs also own or control the operators, so they would always select VocaLink to be the central infrastructure provider in any procurement exercise. One further provider said that it previously perceived VocaLink's ownership as a barrier to entry, especially as the operators had not considered other providers in the past. However, this provider said it would be willing to compete and place a bid if the operators were to hold a competitive tender. They said they had been reassured to an extent by the recent LINK RFI process. Another provider said that a change in the current VocaLink ownership arrangements would increase competition in the provision of central infrastructure services.

**6.170** Another provider said that it is difficult to determine if ownership is a barrier to entry and if it was a weighing factor in the tender selection process. In addition, this provider said that the evidence presented by the PSR does not show a clear link between the current ownership arrangements and harm to consumers. They cite a report commissioned by the PSR which concluded that the ownership structure of VocaLink did not appear likely to have significant detrimental effects on competition.

**6.171** Three of the four largest shareholder PSPs and one other stakeholder told us that we had not demonstrated that the current ownership arrangements are a barrier for rival infrastructure providers to enter the UK market.

**6.172** Two of these explained that to the extent that alternative infrastructure providers are reluctant to enter the UK market, any reluctance is more likely due to the small scale of the UK market, the presence of bespoke UK standards and the lack of transparent procurement processes to date rather than any issues to do with the current ownership arrangements. As a result, the PSR should focus on tackling the issues of interoperability and procurement instead.

**6.173** One of the four largest shareholder PSPs outlined that the PSR has not provided any evidence to support the assertion that ownership is a barrier to entry. It notes that it is not uncommon for such providers to be owned by the largest PSPs in the market, citing other similar jurisdictions where this occurs. According to the PSP, such ownership arrangements 'should not act as a particular source of discouragement to alternative providers'.

**6.174** Another of the four largest shareholder PSPs told us the available evidence did not support a view that current ownership arrangements create barriers to entry. It also points out that (i) a scheme has recently awarded the tender for a new infrastructure contract (the cheque imaging contract) to infrastructure providers other than VocaLink; (ii) schemes use rival providers for European clearing services; and (iii) schemes have negotiated discounts to VocaLink's prices.

**6.175** One non-shareholder PSP explained that for aggregators and gateway suppliers, conflicts of interests create barriers because VocaLink sets the technical accreditation for these providers in addition to offering their own competing commercial solution ('PayPort' for Faster Payments and the ETS service for Bacstel-IP). One other stakeholder explained that the PSR evidence does not prove the case for a change in VocaLink ownership. They explain that although the payments market model in the UK is unique relative to other privatised industries in the UK, it has similarities with the payments markets in other countries and the UK is at or near the front of payment offerings generally. On that basis they consider there is no proof that ownership change will further advance the UK payments market.

**6.176** To further test the perception about the current ownership arrangements being a barrier to entry and to better understand the potential for entry into the UK by alternative infrastructure providers, we sent out a further information request to eight potential alternative infrastructure providers following the close of the consultation.

**6.177** We asked them to confirm whether they would be more likely to participate in a competitive procurement for Bacs, FPS and/or LINK if the UK banks' ownership of VocaLink (the current provider for Bacs, FPS and LINK) was at least partially divested.

**6.178** Of the five responses we received to our questionnaire, two providers explained that they are more likely to participate in a procurement exercise if the UK banks' ownership was at least partially divested while two providers indicated that the current arrangements would not influence their likelihood of participating in a procurement exercise. One provider did not provide a clear view on whether the current ownership arrangements make it less likely to participate in a competitive procurement. Specifically:

- Of the two providers who said that they are more likely to participate if UK banks' ownership of VocaLink was at least partially divested, one elaborated that any divestment of ownership would be seen as positive in ensuring a fully competitive and open process.
- Another provider said that their decision to participate in a procurement process would not be based on considerations on the ownership of a competing infrastructure, but their perceived ability to meet the requirements and offer a competitive solution.
- Another provider said that the ownership framework of VocaLink would not have a significant impact on whether they would bid or not. They explained that their participation in any procurement exercise would be based on the PSR providing clarification on whether the procurement process would be aimed at creating more providers (for the various payment systems) to ensure a split of customers across providers or whether it would be up to the market to create a split.
- One provider, which did not provide a clear view on whether the current ownership arrangements make it less likely to participate, said that whole or partial divestment would not be necessary provided that neutral and open tender procedures were a mandatory requirement.

**6.179** Although the responses to our further questionnaire have provided mixed results, they demonstrate that the current ownership arrangements are being seen by some prospective participants as a barrier to entry into the market for the provision of infrastructure services for the three payment systems of Bacs, FPS and LINK.

### *Our assessment*

**6.180** We find that ownership deters some potential providers from entering the market therefore reducing competition. As we set out in paragraph 6.169, some alternative providers thought they would be at a competitive disadvantage against VocaLink because its shareholder PSPs also own or control the operators of Bacs, FPS and LINK.

**6.181** Given the costs that are often involved with regards to preparing for and participating in a procurement exercise, a perception that the operators are controlled by VocaLink's owners could also work in VocaLink's favour if it deterred alternative infrastructure providers from participating in the procurement. Because of this perceived control (irrespective of the factual ability to control we discussed above), some potential alternative infrastructure providers believe that the operators would always select VocaLink to be the central infrastructure provider in a procurement exercise to provide core services for Bacs, FPS and LINK. Therefore, these providers are less likely to incur the costs necessary to compete.

**6.182** The perception that VocaLink's owners would favour VocaLink exists despite the fiduciary duties that directors have in their roles on the boards of VocaLink and the operators, and which are embedded in the companies' articles of association. We have previously reviewed the governance structure of the interbank payment systems and issued directions which were aimed at addressing possible conflict of interest.[132] However, we find that the perception exists despite these steps having been taken.

**6.183** Stakeholders have argued that a lack of transparency in procurement decisions and the issues of interoperability present more of a barrier to entry for alternative infrastructure providers relative to the current ownership structure as some stakeholders have mentioned. Even if this were the case, that would not mean that ownership is not a barrier to entry for certain prospective entrants.

**6.184** As for the contention that the current ownership should not discourage alternative providers from entering as it is not uncommon that infrastructure suppliers are owned by the largest PSPs, we note that: while it is true that such ownership is not uncommon, the evidence available to us also suggests that competitive re-procurement is rare. Such ownership arrangements being widespread does not therefore support a conclusion that the ownership arrangements do not discourage entry.

**6.185** Regarding the contention that the UK is similar to payments markets in other countries and the UK is at or near the front of payment offerings, we consider that this cannot constitute evidence that the current ownership arrangements do not reduce competition. As we have set out at paragraphs 4.59 to 4.68, the evidence available to us does not support the view that it is competition that drives outcomes in UK payments.

**6.186** We consider that the evidence set out at paragraphs 6.108 to 6.110, when considered alongside the control that the largest shareholder PSPs have on the boards of the operators (which would allow them to favour VocaLink in any procurement exercise) and the incentive these PSPs have to protect VocaLink from competition (see paragraph 6.120), suggests that alternative providers' perceptions of a closed market have some merit.

**6.187** Overall therefore, we conclude that the current ownership arrangements discourage potential alternative providers of infrastructure services from entering the market and competing with VocaLink. This is because rival providers perceive that they will be at a competitive disadvantage to VocaLink in any procurement exercise given its overlapping ownership and governance arrangements with the operators. This is likely to restrict competition by presenting a barrier to entry.

132 PSR General Direction 5 (Governance), which took effect on 30 April 2015. This requires that the operators of Bacs, C&C, CHAPS, FPS and LINK take all reasonable steps to ensure that none of their directors is also a director of one of their system's central infrastructure providers. We put this measure in place following our policy statement in March 2015. The consultation leading to that statement identified potential conflicts of interest for directors appointed to interbank operators' boards. For example, a director sitting on the boards of an operator and a central infrastructure provider could have access to information that may compromise the integrity of the operator's tendering processes – which the central infrastructure provider might participate in. We note that, whilst this measure is now in place, the issues that have been identified in this chapter relate to broader organisational incentives. General Direction 5 is designed to remove the risk, or perception, of specific individual conflicts of interest.

## Conclusions

**6.188** A limited number of large PSPs own VocaLink and are on the governing bodies of Bacs, FPS and LINK. We find that the four largest VocaLink shareholders together control VocaLink and the operators in matters where their interests are aligned (see paragraphs 6.76, 6.79, 6.85 and 6.91).

**6.189** This finding of joint control has two components. Firstly, the four largest shareholders in VocaLink, when acting collectively, have the ability to take (or block) key decisions of VocaLink and each of the operators. Secondly, the four largest shareholders' interests are aligned in (i) matters concerning stability, security and resilience; and (ii) matters that are related to exposing VocaLink to competition. We consider it likely that the four largest VocaLink shareholder PSPs would act in concert in matters where they have a common interest.

**6.190** Due to the joint control that the four largest shareholders exercise, the current ownership and governance arrangements are likely to reduce the level of competition in the market for the provision of central infrastructure services. This is for the following three reasons:

i. **The four largest VocaLink shareholders have an interest in protecting VocaLink from competition**. Exposing it to competition would also put at stake VocaLink's value, and could result in the owners facing calls for capital. Exposing VocaLink to competition [✂] Their control of the operators allows them to protect VocaLink from competition for the provision of services to Bacs, FPS and LINK. VocaLink's attempts to use the links between its shareholders and the operators to protect its position potentially exacerbates the owners' incentives to protect VocaLink from competition. (See paragraphs 6.123 to 6.124.)

ii. **The four largest VocaLink shareholders are unwilling to turn to infrastructure suppliers other than VocaLink as they perceive there is a benefit of using a supplier they control.** They see their ownership and influence over VocaLink as a way of ensuring stable, secure and resilient services. Their control of the operators in these matters allows them to ensure that VocaLink continues to be the supplier. (See paragraph 6.147.)

iii. **Current ownership and governance arrangements discourage alternative providers of central infrastructure services from entering the UK market**. Some alternative infrastructure providers believe VocaLink's owners would favour VocaLink in a competitive procurement. Their control of the operators allows these owners to favour VocaLink in a competitive procurement. (See paragraphs 6.186 and 6.187.)

**6.191** In relation to the second point, we acknowledge that the current ownership arrangements can generate some benefits, for example in terms of stability. However, we note that the corresponding levels of stability could potentially be achieved by other means such as through oversight from the Bank of England, developing better contract specifications and providers own need to preserve their reputation (See paragraphs 6.142 to 6.147.)

**6.192** Moreover, the operators and PSPs do not face a strong incentive to drive, or encourage, effective competition in the provision of core infrastructure (see paragraphs 4.81 to 4.85). The operators are therefore likely to attach much weight to security and resilience, and little weight to the benefits of ongoing competition. (See paragraph 6.147).

# 7. Conclusions

## Our findings

**7.1** We find there is currently no effective competition in the market for the provision of central infrastructure services for Bacs, FPS and LINK.

**7.2** Because products and services in this market are bespoke, operators and PSPs cannot easily compare alternative offerings. Due to this lack of transparency, procurers and providers must exert some effort to establish what alternative providers and potential services are available and adequately compare these. We find that the operators (as current procurers) have not periodically run competitive procurement processes or even sufficiently tested the market when reprocuring core infrastructure services. As a result, the incumbent provider, VocaLink, has faced limited competitive pressure and reduced incentives to provide more efficient and innovative services. We also find that the operators do not have a strong incentive to drive effective competition, while direct PSPs do not have a strong incentive to encourage the operators to do so.

**7.3** Most operators and direct PSPs are satisfied with the value for money, quality of service and innovation they receive from VocaLink. However, we do not observe processes that would provide confidence that the outcomes observed meet the current and ongoing needs of all service-users. This also means that the full ongoing benefits of competition are unlikely to be achieved. We find that in the current market structure for core services, the incentives to innovate are not strong. Furthermore, there is scope for effective competition to drive improved outcomes in terms of value for money, service quality and innovation.

**7.4** We find a number of barriers to effective competition. The lack of competitive procurement exercises by the operators is a barrier to entry that prevents potential providers from competing. There is evidence that a number of potential providers are interested in competing. We also identify the use of bespoke messaging standards as a barrier to entry.

**7.5** A limited number of large PSPs own VocaLink and are on the governing bodies of Bacs, FPS and LINK. We find that the four largest VocaLink shareholders together control VocaLink and the operators in matters where their interests are aligned.

**7.6** This finding of joint control has two components. First, the four largest shareholders in VocaLink, when acting collectively, have the ability to take (or block) key decisions of VocaLink and each of the operators. Secondly, the four largest shareholders' interests are aligned in (i) matters concerning stability, security and resilience; and (ii) matters that are related to exposing VocaLink to competition. We consider it likely that the four largest VocaLink shareholder PSPs would act in concert in matters where they have a common interest.

**7.7** We find that, because of the joint control that the four largest shareholders exercise, the current ownership and governance arrangements are likely to reduce the level of competition in the market for the provision of central infrastructure services. This is for the following three reasons:

i. **The four largest VocaLink shareholders have an interest in protecting VocaLink from competition**. Exposing it to competition would put at stake VocaLink's value, and could result in the owners facing calls for capital. Exposing VocaLink to competition [✂] Their control of the operators allows them to protect VocaLink from competition for the provision of services to Bacs, FPS and LINK. VocaLink's attempts to use the links between its shareholders and the operators to protect its position potentially exacerbates the owners' incentives to protect VocaLink from competition.

ii. **The four largest VocaLink shareholders are unwilling to turn to infrastructure suppliers other than VocaLink as they perceive there is a benefit of using a supplier they control.** They see their ownership and influence over VocaLink as a way of ensuring stable, secure and resilient services. Their control of the operators in these matters allows them to ensure that VocaLink continues to be the supplier.

iii. **Current ownership and governance arrangements discourage alternative providers of central infrastructure services from entering the UK market**. Some alternative infrastructure providers believe VocaLink's owners would favour VocaLink in a competitive procurement. Their control of the operators allows these owners to favour VocaLink in a competitive procurement.

**7.8** We acknowledge that the current ownership arrangements can generate some benefits, for example in terms of stability. However, we note that the corresponding levels of stability could potentially be achieved by other means, such as through oversight from the Bank of England, developing better contract specifications and providers' own need to preserve their reputation.

**7.9** Overall, we find there is currently effective competition in the provision of gateway solutions. The evidence shows that PSPs have enough provider choice and do not all use the same provider. The costs and risks of switching gateway providers are not a high barrier to switching. While PSPs do not switch often, they've done so when there has been a positive business case for it. VocaLink does not appear to gain a competitive advantage for gateway solutions due to its role as the central infrastructure provider. We acknowledge stakeholders' views on transparency around the BASS accreditation process. However, we find that the accreditation process or costs are not a high barrier to entry. Nonetheless, we welcome BPSL's plan to review its accreditation processes.

# 8. Potential remedies

**8.1** Effective competition encourages potential infrastructure providers to make more attractive propositions in terms of quality, and drives them to become more efficient and innovative. In the absence of effective competition the current provider has limited incentive to provide more efficient and innovative services. Lack of competitive procurement exercises means operators are not exposed to potentially more efficient and innovative infrastructure services. This may lead to higher prices and less innovative services for end users.

**8.2** As a result of our findings, we are considering a package of remedies in order to make the market work better.

**8.3** In this chapter, we set out three potential remedies to address the problems we have found. For each remedy we describe, at a high level, a range of ways in which it could be implemented. The potential remedies are broadly the same as three of the potential remedies set out in our Interim Report, but in this chapter we explain our further thinking in regard to some aspects of how the remedies could be designed. As part of this we address some of the issues raised by stakeholders in response to the interim report about remedy design.

**8.4** At this stage we have not carried out a detailed assessment of these high level remedy options for either their effectiveness or proportionality. Nor have we specified the remedies in detail. Some of the options we outline may therefore not be effective. Equally, some could be effective but would not be proportionate to implement. We propose to carry out such an assessment in the coming months.

**8.5** We will continue to engage with stakeholders in the coming months to develop our remedies. As part of this process we will consider the stakeholder views we have already received, and which are summarised below, as well as any additional responses we receive on the high level options outlined below. Stakeholders are invited to submit any responses to us by 22 September 2016.

**8.6** When developing our remedies we will ensure, where appropriate, that they take into account the ongoing work of the Payments Strategy Forum (the Forum). We also note that, when considering the package of remedies as a whole, their sequencing and interaction with each other, and with industry developments (including the work of the Forum), is particularly important.

**8.7** We aim to consult on our proposed remedies decision towards the end of the year and then issue a final decision on remedies in early 2017. The remedies consultation will include specific remedy proposals and an assessment of the effectiveness, proportionality and design of each remedy and the package as a whole.

**8.8** Our remedies focus on three areas:

1. competitive procurement of core infrastructure services for Bacs, FPS and LINK
2. interoperability and messaging standards
3. ownership of VocaLink

**8.9** On the ownership of VocaLink, we note that MasterCard has recently agreed to acquire VocaLink, subject to regulatory approval and other customary closing conditions.[133] This transaction will require clearance from the relevant merger authorities. We are not a relevant merger authority and do not make any comment here on that assessment. However, with regard to the competition issues we have identified in this review, in particular ownership and control issues discussed in Chapter 6, we note that it appears this transaction would change the ownership arrangements of VocaLink in a way which could address the issues we have identified as causing a restriction of competition currently.

## Key principles for considering remedies

**8.10** As discussed in our guidance[134], we have a range of options that we could explore in developing the remedies. Some of these are actions we can take, and some are actions we can ask others to take. They include:

- making new, or amending existing, general directions
- making specific directions (which could apply to individual participants or categories of participant), with reference to governance arrangements for infrastructure providers
- requiring the disposal of all or part of an interest in an infrastructure provider in relation to a regulated payment system
- making recommendations for further industry initiatives or enhanced industry self-regulation
- making proposals to the Bank of England, Financial Conduct Authority (FCA) or Prudential Regulation Authority as appropriate
- publishing guidance
- asking the Competition and Markets Authority (CMA) to consider investigating the market(s)

**8.11** When deciding on our remedies – both individually and as a package – we will consider:

a. **Effectiveness:** The remedy must address the problem(s) we have identified and be practicable to implement, monitor and enforce. We will take account of current laws and regulations, as well as those expected in the near future. We will also consider the way in which the remedies interact with each other.

b. **Proportionality:** The remedy needs to solve the problem(s) we have identified in a way which is no more onerous than necessary. For example, if there is a choice between two equally effective remedies, we would choose the option that is least intrusive. The remedy should also not produce disadvantages which are disproportionate to its aim.

c. How the remedy (or package of remedies) fits in with our other policies relevant to the provision of infrastructure services, as well as other relevant industry developments.

**8.12** The ongoing work of the Forum is particularly relevant. It has published a draft strategy and its final strategy is expected in November 2016. We will evaluate the Forum's recommendations and the way they relate to this market review and we will consider what, if any, impact they will have on the design of our remedies or their implementation.

133 http://investor.mastercard.com/investor-relations/investor-news/press-release-details/2016/MasterCard-Announces-Acquisition-of-VocaLink/default.aspx

134 PSR PS15/2.2 Market Reviews, *Market Studies and Market Investigation References Guidance, A guide to the PSR's Powers and Procedures (Markets Guidance)* (August 2015)

8.13 We now outline our remedies, which we are considering as a package. We begin by making some general observations. For each potential remedy we then summarise the stakeholder views we have received so far and outline the high level implementation options we are currently considering. We also summarise views we received on the package as a whole.

## Our remedies

### General observations

8.14 These remedies should be considered as a package. Taken together they aim to address the issues we have identified in this report. Because each element of the package can be implemented in a number of different ways an important consideration is whether the individual remedies, when taken together, are an effective and proportionate response to the problems we have identified. An assessment of the package as a whole will be part of the consultation on our proposed remedies decision.

8.15 Our proportionality assessment will consider the costs and the benefits of our remedies. The benefits we consider in this assessment are likely to include both static and dynamic benefits.

8.16 We recognise that these remedies are focused on the issues identified in this market review, which had its focus on procurement arrangements and on the common ownership by PSPs of the operators and the infrastructure provider. It is not our intention to signal that the present three-party structure (in terms of structure and arrangements) of PSP, operator and infrastructure provider should continue indefinitely. We are open-minded about future arrangements and we do not want our remedies to impede any structure that may develop in the future. As the market develops we will want to consider the appropriateness of any remedies that are put in place. We note, in particular, the Forum's current work in this area.

### Remedy 1: Competitive procurement exercises

8.17 In Chapter 4 we found that the lack of competitive procurement exercises is a barrier to entry that prevents other potential providers from competing, despite several being interested in offering central infrastructure services. We found that the operators and largest PSPs lack the incentive to seek alternative offerings. The operators, as the current procurers of infrastructure services on behalf of the PSPs, do not look for alternative providers. They have not held periodic competitive procurement exercises that would allow them to directly compare the potential offerings of alternative providers. And the largest PSPs – as the main users of the payment systems – do not encourage the operators to seek alternatives.

8.18 We are considering a remedy that competitive procurement exercises are undertaken for central infrastructure services. We expect this to increase competition in the provision of central infrastructure services, thereby benefiting service-users by introducing more efficient and innovative service offerings.

#### *Stakeholder views on remedy*

8.19 Half of the stakeholders that commented on this remedy were in full of support of it and thought it would be effective; most of these stakeholders were challenger or small PSPs and infrastructure providers, but they also included two of the largest PSPs. One direct PSP said that a transparent procurement process was overdue.

**8.20** Some stakeholders were not opposed to the remedy, but felt that it would not be effective:

- One operator and one direct PSP said that there needed to be a sufficient number of credible alternative providers that could compete against VocaLink for a competitive procurement to be effective. The PSP did not think there was evidence that there are credible alternative providers.
- Two infrastructure providers said that the current market structure needs to change first. These stakeholders believed that there first needed to be a reform of payment systems' governance and direct contracting between PSPs and infrastructure providers – with more than one provider competing in the market – before a competitive procurement process would be effective. One provider said that direct contracting would encourage more providers to compete in the UK market because they would perceive that they have a better chance of winning work, rather than competing for the market against the incumbent, VocaLink.

**8.21** Two direct PSPs and one independent ATM deployer (IAD) said they did not support the remedy of a full competitive procurement process because it would not bring more benefits than other, less costly, procurement methods.

*Design*

**8.22** Three stakeholders said that the remedy would not be effective if it was too prescriptive. They noted that operators need flexibility in their procurement approach to be able to achieve the best value for money. Two direct PSPs also warned that an overly prescriptive remedy would limit its effectiveness.

**8.23** An industry body said that the market-testing phase should demonstrate that overall benefits could be achieved before proceeding with a competitive procurement process.

**8.24** One operator and one direct PSP said that it is possible to run a competitive procurement process for new systems, and this has been done in the UK. However, these and two other stakeholders highlighted findings in the Lipis report that competitive re-procurement of an existing payment system is not common in other countries, adding that in those instances the incumbent had won the tender. The two direct PSPs noted that competitive procurement processes for complex IT systems are difficult to run for established systems as the incumbent has the advantage of detailed knowledge of the system.

**8.25** The three operators, four direct PSPs and one infrastructure provider believed that the operators are best placed to undertake the exercise as they have the expertise and knowledge to ensure all users' interests are considered and that obligations for security and resilience are met. Other stakeholders, including two direct PSPs, an infrastructure provider and an industry body believed that a third party should run the process to ensure it is effective. One direct PSP said that the third party should be a procurement expert – it could work in conjunction with an operator, but should independently run the process to ensure it delivers the best outcomes.

*The procurement process*

**8.26** Two PSPs and one IAD agreed with the remedy outlined in the interim report. One of these PSPs also said that the strategy design should reflect that the latest developments in technology may not be the most suitable tools for next generation of payment systems. It added that stability and resilience must be an important factor in the strategy.

**8.27** Five stakeholders commented on the development of the procurement strategy:

- One direct PSP and an industry body said the strategy design should be based on best practice and benchmarked against other successful exercises, as this would mitigate unintended consequences.

- Another direct PSP and the industry body said the strategy must include a risk and opportunity assessment of all procurement options.
- One infrastructure provider said the procurement strategy should ensure that innovative solutions should not be ruled out in the early stages of the procurement.
- One direct PSP said that we should consult closely with the operators on the design of the procurement process to ensure costs are minimised and adequate flexibility is incorporated in the process.
- The industry body added that the strategy should be a single common process across all services to avoid additional complexity, duplication and inefficiency.

**8.28** Five stakeholders said that the procurement strategies must be aligned with work of the Forum to achieve the best outcomes. However, one infrastructure provider noted that the procurers should consult a wider group of users – all parties that would be affected by any changes to central infrastructure – rather than relying on the Forum's work. This is because it believes non-PSP users are underrepresented on the Forum. One operator said that the Forum should not have any say in the design of the strategy as procurement is not an industry collaborative process.

**8.29** One operator, four PSPs and an industry body were positive about testing the market as part of the procurement process.

**8.30** Five stakeholders said that independent auditing of the competitive procurement process should be used. They said it will help ensure a fair and open process and increase potential infrastructure providers' confidence to compete. One of these PSPs cautioned that the auditing should not be unduly onerous, but the authorities should intervene if appropriate.

**8.31** In contrast, one PSP and an infrastructure provider believed that independent monitoring was onerous and unnecessary; the infrastructure provider highlighted that this is not a requirement for procurements in recognised monopolies.

**8.32** One direct PSP commented that it would be unduly prescriptive for us to set the selection criteria for the procurers; rather we should only set high-level principles.

**8.33** VocaLink believed that it was unnecessary for the remedy to require operators to satisfy themselves that VocaLink is obliged to enable a switch in provider. It said the operators have already confirmed that their contract provisions are sufficient.

### *Costs and benefits*

**8.34** Two direct PSPs said that the cost of running a competitive procurement process would be high. One of these said it would be a complex and lengthy process, lasting at least two years, and would require external consultants. It added that there would also be an opportunity cost of diverting resources from other priorities of the operator. Another direct PSP gave the example of recent rail franchising contracts, which it estimated cost £10 million for bidders to participate, although it noted that rail tenders are more complex.

**8.35** In contrast, another direct PSP believed the cost of running a competitive procurement process would not be significant relative to the benefits that would be achieved.

**8.36** One infrastructure provider noted there would be a cost associated with determining how to present any procurement exercise in a way that would encourage maximum participation.

**8.37** One direct PSP said the cost of participating in the process would not be a barrier to potential infrastructure providers if they were confident it would be a fair process. One infrastructure provider and a direct PSP said that a complex tender process would be costly for a potential bidder to respond to. However, this infrastructure provider said this cost could be reduced if the provider were given access to the incumbent's proprietary standards and intellectual property that might be needed to develop their proposed solutions.

**8.38** Many stakeholders noted that the costs and risks associated with switching providers need further analysis to understand the costs and risks involved. Seven stakeholders cautioned that the costs and risks could potentially be high enough that switching provider would not be beneficial, which could limit the effectiveness of the remedy. As an example of the potential costs involved, one direct PSP gave the example of costs associated with the introduction of CASS. It said that 10% of the costs related to building the central infrastructure and the remaining costs related to changes to PSPs' internal systems. One operator noted that the implementation of pre-funding was a significant project and this did not require a change to the central infrastructure.

**8.39** Two stakeholders said that the costs associated with switching would be likely to be passed on to end users.

**8.40** One infrastructure provider noted that there could be other costs associated with using another, independent provider. It said VocaLink's ownership structure implied a self-policing mechanism on managing investments and returns, but if a different provider (or owner) is used, there would need to be an administrative regime established to monitor this, which could be costly.

**8.41** Consulting firm Lyddon cautioned that if each payment system changed infrastructure every five years, then there potentially could be a migration of PSPs between infrastructures every year or there could be a series of 'big-bang' migrations, which would increase the risks to security and resilience of the payment systems.

**8.42** Five stakeholders commented on the potential benefits of the remedy. They saw the potential for a competitive procurement exercise to deliver lower prices, enhance functionality of the central infrastructure, and clarify the services that end users require and the costs and quality of services that are to be provided.

**8.43** Two operators noted that a competitive procurement process could deliver lower prices, but that it should not be the driving factor. They said that security and resilience are more important. One of these operators and two direct PSPs believed that benefits will come from testing the market.

**8.44** Five others believed there would be limited benefits because current outcomes are already competitive or because they thought that central infrastructure costs are small relative to the overall cost of payments infrastructure.

### *Alternative remedies*

**8.45** Seven stakeholders proposed alternative remedies. These were:

- setting procurement guidelines
- benchmarking, audit rights, and the EU Procurement Directive's negotiated procedures
- requiring procurers to develop procurement strategies which set out their intended approach (including testing the market)
- postponing implementation of the remedy until current and expected market and regulatory changes have been incorporated
- implementing direct contracting between PSPs and central infrastructure providers, which would increase competition **in** the market and encourage potential infrastructure providers to compete
- encouraging more PSPs to become direct members of payment systems

### *Timing*

**8.46** On timing, eight stakeholders cautioned against requiring the process to be run too soon. They noted the number of current regulatory and industry driven changes. For example, four stakeholders noted that other issues – such as agreement on common messaging standards, the strategic direction of UK payment systems, and potential unbundling of services – should be resolved before a procurement process is undertaken. They noted that it would be counter-productive to run a procurement process if conditions are still changing.

**8.47** An infrastructure provider, one operator and a direct PSP did not think it would be possible to be prepared to run a procurement process by the time of the early break clauses. Two operators said that the decision to run a procurement exercise at the next break clause should be left to the operator, as an operator can use the uncertainty of when the next procurement will occur as leverage in negotiations.

**8.48** The three operators, some challenger PSPs and one indirect PSP believed that the competitive procurement process could be undertaken in time for the next contract renewal (around 2020 and 2021). Two of these stakeholders said it could also be implemented for the next break clause in the contracts.

**8.49** Two stakeholders said that coordinating procurement across the three payment systems would be beneficial.

**8.50** Two other stakeholders were not opposed to coordinating procurement across payment systems. An infrastructure provider said that coordination by the procurers could increase transparency and avoid monopolistic bids for multiple services. One direct PSP said that there are sufficient differences amongst the payment systems that coordinating should not be detrimental. However, it added that if the processes are coordinated, the timeframes for the process should be considerate of providers that may bid for multiple services.

**8.51** One direct PSP said that coordinating the process could enable comparison of evaluations and the possibility of reform to the current market structure. However, it commented that coordination could be more complex and costly to implement. It suggested that the Forum might be best placed to consider this issue.

### *Other issues*

**8.52** Faster Payments Scheme Limited (FPSL) and Link Scheme Limited (LSL) said they are planning to run competitive procurement exercises for the next contract renewal for core services. BPSL said it is planning to run a benchmarking survey as part of its next procurement approach, which it said will help it to interrogate the market and identify any potential barriers for providers.

**8.53** Six stakeholders said that the procurement strategies must be aligned with the Forum's work to achieve the best outcomes.

**8.54** Regarding potential unintended consequences, one direct PSP and an infrastructure provider cautioned that other planned work or improvements to the existing infrastructure might be halted while the competitive procurement is being undertaken. They said this is because the requirements would need to be specified to run the procurement process and should not be changing during the process or potential bidders could be discouraged. They said this could forestall innovation and competition during that time.

### *Our options for implementation*

**8.55** We will consider the views of stakeholders outlined above, together with any new submissions we receive (see paragraph 8.60), in designing our remedy for consultation.

**8.56** We believe it is important that any procurement remedy design does not embed the current industry structure and takes account of the work of the Forum. We also believe that there is less potential benefit in mandating a procurement exercise to replace the existing infrastructure on a like–for-like basis. This is because a like-for-like replacement of existing infrastructure limits the ability for innovation, including testing what new requirements service-users may have. We note the range of stakeholder views on how prescriptive our remedy design should be. The high level implementation options outlined below reflect this range of views.

**8.57** We are currently considering four high level options for this remedy. These vary in intrusiveness and prescriptiveness, and include some options suggested to us by stakeholders. These are:

a. **Issuing guidelines:** We would set out best practice guidelines for procurement, but would not compel industry to follow these. These guidelines would set out the main elements that we consider would constitute an effective procurement exercise.

b. **Requiring the operators to set a procurement strategy:** We would require the operators to develop and publish a procurement strategy. Under this option we could also require the strategy to be approved by us, and audited by an independent third party.

c. **Mandating competitive procurement:** We would mandate that competitive procurement is undertaken by a specified date. We would specify the elements that we consider should be part of the competitive procurement process, but would otherwise not prescribe this process. We may also require that the operators report to us on their compliance with these elements. It may also be appropriate to have a sunset clause (a date beyond which this remedy no longer applies).

d. **Mandating competitive procurement and additional requirements:** We would mandate both a competitive procurement exercise and other additional requirements. For example, we may require an independent audit, or that the process is run by an independent party. As above, we may require the operators to report to us on their compliance and it may be appropriate to have a sunset clause.

**8.58** Based on our findings in Chapter 4, our current thinking is that a competitive procurement exercise (that is options c. or d. above) is likely to be necessary.

**8.59** [✂]

**8.60** We welcome additional stakeholder feedback on: the effectiveness and proportionality of these high level options; how they would interact with the ongoing work of the Forum; how any remedy should capture the needs of service-users; and how we can ensure that our remedy does not inhibit any new future market structures from developing.

## Remedy 2: Interoperability and messaging standards

**8.61** In Chapter 4 we found that the bespoke messaging standards used by Bacs and FPS act as a barrier to entry, which makes it more difficult for alternative providers to effectively compete. As a remedy we propose that international messaging standards are adopted for Bacs and FPS to facilitate greater choice of infrastructure provider, innovation, development of alternative market models for payments and increased resilience. We also found that the LINK bespoke messaging standard makes it more difficult for alternative providers to effectively compete to provide infrastructure services. However, given the different set of competitive constraints characterising LINK we will consider whether a similar remedy is appropriate for LINK. Finally we note that there may also be wider benefits of increasing commonality of operating rules and standards for interoperability between UK systems, which could help improve security and resilience.

### *Stakeholder views*

**8.62** The majority of stakeholders said they supported or partially supported this remedy. They confirmed that more interoperability, and in particular the adoption of common international messaging standards, can play an important role in reforming the industry to promote competition and innovation and better meet users' needs.

**8.63** LSL expressed concerns about this remedy, mainly because of the potential unintended consequences for the LINK scheme (discussed below). While they generally supported this remedy, other stakeholders also shared these concerns relative to LINK.

### *Costs and benefits*

**8.64** Several stakeholders said that a 'big bang' migration to a new messaging standard would be very costly for the industry, as it would require PSPs and corporates to upgrade and rebuild their back-office systems. Stakeholders said that a way to mitigate this issue is using a 'phased approach' where, for a limited period, existing messaging standards would coexist with the new messaging standard. This would be possible by using translation services and payment aggregation services.

**8.65** In May 2009 the Payments Council's Standards Policy Group outlined the following benefits of common international messaging standards:

a. **Reduced operational cost:** Common messaging standards between schemes (irrespective of payment instrument) will greatly improve operational efficiency and system flexibility, and reduce indirect costs, such as back-office system maintenance and support.

b. **Reduced cost of compliance and risk management:** Common standards will reduce indirect, non-value adding costs associated with operational and legal compliance testing and maintenance. They will facilitate improved liquidity and collateral management with reduced technical complexity in a cross-scheme and network environment.

c. **Improved integrity at less cost:** Common standards are a foundation for enabling improved cross-scheme integrity, or for one message format to be conveyed across multiple schemes or networks.

d. **Greater service provider choice at reduced cost:** Aligning domestic standards with open standards widely used in other regions and based on modern technology will improve the range and choice of service providers that can support the UK payments industry. Greater competition between service providers is likely to drive down cost.

e. **Faster, cheaper industry innovation:** Common standards will create a more cohesive collaborative cross-scheme basis to develop concepts more rapidly and cost effectively by re-using and extending common services, reducing time to market and avoiding service replication.

f. **End users' benefits:** Common standards for payments aid straight-through processing and simplification of back-office operations. Common, richer format standards will also aid reconciliation as part of accounts receivable processing, which in turn improves cash management operations liquidity.

**8.66** Almost all stakeholders said that ISO 20022 has a greater potential as it enables richer functionality compared to existing standards, especially for Bacs and FPS. Stakeholders listed numerous examples of benefits that ISO 20022 could generate. For example: ensuring enhanced capabilities, more competition and lower pricing; allowing for more reference data to be carried; and a greater potential for future value added services (for example, e-invoicing and controllable push payments) as well as the provision of additional enhanced structured remittance data with payments.

**8.67** Many stakeholders mentioned that the Forum is assessing the business case and the best approach for a transition to ISO 20022. These stakeholders said the PSR should align its market review with the relevant work-streams being undertaken by the Forum. They also said that the remedy would require a full cost/benefit analysis.

*LINK issues*

**8.68** Stakeholders expressed concern about the potential unintended consequences of this remedy for LINK. Four stakeholders said that the benefit of LINK moving to ISO 20222 is not clear considering that LINK is closely aligned to the card systems Visa and MasterCard, all of which operate on a variant of the ISO standards for card payments (ISO 8583). Two of these stakeholders said that our proposal to migrate LINK to a new messaging standard will result in loss of interoperability at card scheme level (i.e. interoperability between LINK, Visa and MasterCard).

**8.69** Three stakeholders said that for the LINK scheme, full end-to-end migration to a new messaging standard may induce its members to switch to alternative card systems in order to avoid the costs of transition to a new messaging standard (i.e. the costs necessary to change their LINK interfaces in case of adoption of a new messaging standard).

*Implementation*

**8.70** On implementation, several stakeholders suggested that a phased transition was recommendable. Some explained how a new messaging standard is a large and complex programme of work requiring effective governance mechanisms that will need to be coordinated by an appropriate central UK body.

**8.71** Some stakeholders noted that further interoperability at central infrastructure level would be possible with the simplification and the standardisation of governance agreements, operating rules, processes and other technical standards.

*Alternative remedies*

**8.72** FPSL proposed an additional interoperability remedy. This is to unbundle connectivity and central infrastructure provision, both currently provided by VocaLink. It would be replaced with an independently supplied connectivity layer, supported by multiple competing telecoms providers, allowing each PSP or technical aggregator to competitively select one or more telecoms suppliers and then easily be connected with all payments infrastructures.

***Our options for implementation***

**8.73** We note the Forum's proposal in this area and the need to ensure that our remedy aligns with this work.

**8.74** We are currently considering two high level options for implementation. These are:

- **Option 1: Mandating the adoption of an international standard**.
  Under this option the operators would be required to procure central infrastructure services to be provided under a common international messaging standard. We would not mandate the approach to be used. It could involve the use of translation services enabling the coexistence of the existing standards with the new one, or it could involve a full transition to the new standard (e.g. an end-to-end implementation). The latter could be either a 'big bang' transition or a phased transition making use of translation services for a transitory period.

- **Option 2: Mandating the adoption of an international standard and the approach to be used.**
  Under this option we would mandate the standard to be adopted and also the approach to be used. This would be a phased transition where co-existence of the existing messaging standards and the new one would be enabled, for a limited period, by using translation services. At the end of the transition period the new standard would be fully adopted.

**8.75** We recognise that under option 2 the timing of any requirement to adopt a new messaging standard (see paragraph 8.74 above) is important. We note the effect that the timing of this transition period may have on proportionality, as a shorter implementation period will raise industry costs. However, a long migration period will mean a delay in users receiving the full benefits.

**8.76** As noted in Chapter 4 (see paragraph 4.281), the vast majority of LINK members already have an established connection with the VISA and MasterCard core infrastructures. Based on this, and stakeholder feedback, we currently believe that LINK faces a different set of competitive constraints to Bacs and FPS. Adoption of a common international messaging standard could have unintended consequences on the LINK scheme. In addition, there may be reasons to believe that the benefits of it adopting ISO 20022 could be more limited for LINK. We will consider these points further in our remedies consultation.

**8.77** In addition to mandating adoption of a common international messaging standard we also considered the implementation of other changes to scheme rules to enhance interoperability. This is because four stakeholders noted the lack of common technical standards and the lack of simplification and standardisation of operating rules and business processes characterising the UK payment systems. They explained that further simplification and standardisation of these across UK payment systems – in addition to the adoption of a common international messaging standard – would help make the UK more innovative and attractive to payments infrastructure providers operating in other countries. They also noted that this would be consistent with a process of consolidation of certain UK payment systems operators, and that this could be a desirable outcome.

**8.78** We recognise the benefits that can come from harmonisation and consolidation of UK rulebooks and consolidation of certain UK payment systems operators. However, these may go beyond the benefits of competition for the provision of central infrastructure services – these changes have implications for the industry beyond the scope of this review.

**8.79** In this regard we note that in its work on simplifying access to markets the Forum – amongst other things – is examining the potential for greater alignment and integration of certain UK rulebooks and the consolidation of certain interbank payment system operators.[135]

**8.80** We will wish to explore the costs and benefits of the options we have set out with regards to timing and scope of implementation in the coming months.

**8.81** We will consider the proposed alternative remedy suggested to us of unbundling connectivity and central infrastructure (see paragraph 8.72). We are concerned, however, that requiring this change would preclude the development of a fully interoperable model with multiple infrastructure providers being able to contract directly with PSPs, corporates and other relevant institutions and/or with these market participants being able to clear payments within a decentralised model. As noted above, we do not want our remedies to preclude any structure that may develop in future.

**8.82** We welcome additional stakeholder feedback on the effectiveness and proportionality of the remedy options we have identified; the messaging standard to choose; who should choose it; the timing of any implementation; and how this remedy should interact with the ongoing work of the Forum.

## Remedy 3: Ownership of VocaLink

**8.83** In Chapter 6 we found that the four largest PSPs' common ownership and control of both the operators and VocaLink is likely to reduce the level of competition in the market for the provision of central infrastructure services.

**8.84** The third aspect of our proposed remedy package is therefore the divestment by the four largest VocaLink shareholders of their interest in VocaLink.

135 Payments Strategy Forum, *Being responsive to user needs – A draft strategy for consultation* (July 2016), page 71: https://paymentsforum.uk/consultation

### *Stakeholder views on ownership of VocaLink*

**8.85** The majority of stakeholders commenting on this proposed remedy said it would be effective in increasing competition in the provision of central infrastructure services. Three shareholder PSPs and one IAD said that security, stability, resilience and the needs of end users must be preserved for the remedy to be effective.

**8.86** However, seven respondents, including two of the four largest shareholder PSPs, said that the remedy was unlikely to be effective in addressing the competition issues identified:

- One of the four largest shareholder PSPs and two other respondents said that this is because the other two remedies we proposed would be more effective in addressing the issues identified, without resorting to a change in ownership arrangements. The PSP said that the PSR should seek to address these two issues first before contemplating the significant step of requiring owners to sell an asset that they have invested in over many years. One of these respondents also said that our evidence does not prove the case for a change in VocaLink ownership because whilst the payments market model in the UK is unique relative to other privatised industries in the UK, it has similarities with the payments markets in other countries and the UK is at or near the forefront of innovation in payment offerings generally. On that basis, there is no proof that ownership change will further advance the UK payments market.
- One technology provider said that the remedy was unlikely to be effective because it would result in an increase in administration costs, particularly when new central innovations are being carried out. Another stakeholder noted that the proposed remedy has not been subject to a proper assessment process and that one should be carried out before proceeding.
- [✂]

### *Costs and benefits*

**8.87** In terms of costs, one of the four largest shareholder PSPs and one infrastructure provider said that shareholder PSPs could incur disproportionate costs (relative to the benefits of the remedy) because they would receive a lower price for their shares under a divestment scenario than they would if they sold their shares willingly. One shareholder PSP said that alternative providers could place more focus on cost reduction, thereby compromising on resilience and operational excellence – creating risks and costs for end users.

**8.88** One technology provider said that the remedy could result in a potential increase in the administrative costs of delivering the service, including the costs of central innovation projects. Costs for innovation could increase because the current arrangements support a centralised and collaborative build-up of capital to fund new projects at minimum costs. The fear is that new ownership arrangements may require more costly bespoke funding arrangements for each new innovation project.

**8.89** A provider of central infrastructure services said that if the process is not managed correctly, the management of VocaLink could lose their operational delivery focus and rival providers might be reluctant to enter the UK market. Another infrastructure provider warned of the service potentially being degraded with a change of supplier if value-added services are not made available for API access and tendered out as well.

**8.90** One of the four largest shareholder PSPs also explained that under the current ownership structure, the banks as users and shareholders have an incentive and ability to maintain VocaLink as a going concern especially given past recapitalisations. However, it explained that under third party ownership, there are no mechanisms guaranteeing that such recapitalisations would happen in future, including who would provide the funding required and what the timescale would be, potentially putting service provision in doubt. It explained that this issue could be resolved contractually with the operator although it would be difficult because contractual protections alone may not be enough to ensure continuous service provision. It suggested that we should consider which contractual and regulatory mechanisms could best tackle this issue.

**8.91** In terms of benefits, one shareholder PSP, one indirect PSP and one infrastructure provider said that the proposed remedy could generate more competition and innovation in the market for the provision of central infrastructure services. The infrastructure provider said that the proposed remedy could potentially reduce costs for end users and result in more innovation.

**8.92** One operator believed that the proposed remedy could result in improvements to the scale and expertise of VocaLink, allowing it to be more competitive internationally. This operator said that the remedy could result in VocaLink being a better supplier because it would hold a higher degree of knowledge and expertise as a result of a change in ownership.

### *Unintended consequences*

**8.93** One operator was concerned that transferring the ownership of VocaLink to one of the other rival infrastructure/switch providers (card schemes) would result in a decrease in the number of potential providers in the market, creating competition concerns. This operator said that should the remedy go ahead it should be accompanied by firm plans on how the number of competitively connected switches will be maintained, including how the barriers to changing connectivity could be improved.

**8.94** One of the four largest shareholder PSPs said that there are risks of creating an unchecked monopoly provider which could have implications for price and performance if credible competition does not materialise following the transfer of ownership. Another operator said that we should ensure that a change in ownership does not result in similar shortcomings in ownership where member banks own a separate company that bids to takeover VocaLink. [✂] One other operator said that the remedy could potentially result in destructive and long term conflicts of interests similar to those posed by VocaLink currently. This operator also said that if the new owner failed to meet its supplier criteria or introduced any risks then the operator would exercise its change of control rights.

**8.95** One of the four largest shareholder PSPs, two shareholder PSPs and one operator outlined that new owners could place more emphasis on other priorities (e.g. cost reduction), to the detriment of security, stability and resilience. In this scenario, one operator outlined that it would terminate its relationship with VocaLink if it is not satisfied with the safeguards or assurances provided by the new owner. [✂]

**8.96** One respondent outlined that potential owners of VocaLink may be unwilling or unable to take over the value added and overlay services that VocaLink currently provides without demanding higher prices or longer contracts.

**8.97** One of the four largest shareholder PSPs said that shareholder PSPs could receive a lower price for their shares under a divestment scenario than they would receive if they sold their shares willingly.

### *Design, including full or partial divestment*

**8.98** Several stakeholders were opposed to us being too prescriptive about the timeframe for any potential divestment as this could have negative consequences. Three of the four largest shareholder PSPs, one shareholder PSP and one infrastructure provider said that VocaLink's shareholders would not be able to get a fair market price for their shares as the market could view the situation as a fire sale. One of the four largest shareholder PSPs said that the PSR should give sufficient time for a controlled disposal to occur. The infrastructure provider explained that a period of less than 12 months could give the impression of a fire sale.

**8.99** Two of the four largest shareholder PSPs believed that being too prescriptive would attract opportunist bidders looking to take advantage of the regulatory intervention to get a bargain.

**8.100** One of the four largest shareholder PSPs, one shareholder PSP and [✂]were concerned that shareholders would not be given the opportunity to find buyers and negotiate a commercial sale of their shares. [✂]

**8.101** [✂] Another of the four largest shareholder PSPs and one other respondent said they would prefer to see the procurement and interoperability remedies implemented before any sale occurs. One operator, one of the four largest shareholder PSPs and two central infrastructure providers said they would prefer to see the divestment process conclude before the procurement exercise commences.

**8.102** Nine stakeholders said that any potential purchaser of VocaLink should demonstrate that it has a proven track record in providing a stable, continuous and resilient service at a good price. Seven respondents said that any potential purchaser of VocaLink must be subject to regulatory oversight by the PSR and the Bank of England to ensure that the financial stability impacts of the sale/purchase are properly considered. [✂] One of the four largest shareholder PSPs, two other shareholder PSPs and one operator said that any potential purchaser of VocaLink should have to demonstrate that it would maintain the level of investment in innovative solutions to future-proof the UK payment systems. [✂]

**8.103** One operator suggested that the new owner should have a good record of compliance, must be in a strong enough financial position to absorb losses without affecting service provision, must plan to be around for the long term and should be willing to allow the operator to step in if service continuity is challenged (step in rights). The operator explained that the new owner should also be domiciled in an area of transparent corporate governance.

**8.104** However, three stakeholders, including one of the four largest shareholder PSPs, were not in favour of us being prescriptive about the development of any suitability criteria for potential purchasers of VocaLink. One of these respondents said that we do not have the power to attach conditions, such as a purchaser suitability requirement, to a divestment. It said our own guidance on the application of section 58 of FSBRA makes no reference to our ability to impose additional requirements such as suitability criteria. It added that the UK regulatory framework already grants the PSR and other government agencies (such as the CMA and Bank of England) power to intervene to ensure that any change of ownership does not raise competition or financial stability concerns. [✂]

**8.105** Six stakeholders, including one of the four largest shareholder PSPs, favoured a partial divestment rather than a full divestment. Some of these respondents, including one of the four largest shareholder PSPs, said that this would ensure that the larger PSPs no longer had control in the new ownership structure but remained to offer their insight and expertise. None of these stakeholders expressed a view on what level of shareholding PSPs should be restricted to in a partial divestment.

**8.106** One infrastructure provider noted that in previous relevant merger cases where the Competition Commission required divestment, it decided that full divestment would be unnecessary and therefore disproportionate. This provider said that a full divestment would therefore not be reasonable or proportionate.

**8.107** One PSP commented that a partial divestment would be the best strategy to encourage a wide set of interested parties to participate in the tender process as it would give them the confidence of a level playing field.

**8.108** [✂] One stakeholder said that a full divestment was necessary to completely remove any incentives the PSPs may have to shield VocaLink from competition and undermine any future procurement exercise.

**8.109** On whether board changes were also required:

- Two operators and one shareholder PSP outlined that changes in board composition would happen automatically to suit the needs of the new owners. The shareholder PSP respondents outlined that it will be important for the new owners to be able to connect with stakeholders and end users to ensure effective delivery of services. [✂] Another operator commented that it expects the new governance model (including those for specific user forums) to be appropriate, proportionate and representative of the shareholders post divestment, without additional risk to operators.
- One trade body said that governance should also be considered as part of any proposed remedy.
- VocaLink said that we do not have the powers to impose any requirements on any new owner of VocaLink with respect to the composition of its board. It argued that section 58 of FSBRA does not allow us to impose such additional criteria and therefore we have no basis to do so in the context of the proposed divestment remedy. It also argued that changes in governance are unlikely to increase competition and innovation and could even possibly harm them.

### *Alternative remedies*

**8.110** One operator said that while divestment could be effective, a more effective remedy would be to consider whether the operator is independent of any suppliers or the suppliers' owners. It said that the operators, as procurers, should be able to operate independently when tendering for central infrastructure.

**8.111** No other stakeholders suggested an alternative remedy. But two stakeholders said that the other two proposed remedies, on interoperability (including common messaging standards) and competitive procurement, would be effective alternatives to divestment and would be less intrusive.

### *Our options for implementation*

**8.112** We are currently considering three high level options for implementing this remedy and one alternative remedy suggested to us. The three options are:

- **Partial divestment**: We would require the four largest PSPs to partially divest their shareholding in VocaLink so that their combined holding fell below a specified level. Our early thinking is that divestment to a level below that required to block a special resolution may be appropriate.[136] This suggests divestment by the four largest PSPs to less than a 25% combined shareholding, assuming VocaLink was sold to a single purchaser.
- **Full divestment**: We would require the four largest PSPs to fully divest their shareholding in VocaLink.
- **Partial or full divestment plus governance changes:** In addition to full or partial divestment of VocaLink we could also require governance changes – for example, requiring the four largest PSPs not to seek or accept board representation at VocaLink.[137]

**8.113** An operator suggested to us that a more effective remedy might be operators that are independent of any suppliers or the suppliers' owners. As part of our remedies consultation we will consider whether this is an effective (and more proportionate) remedy to the ownership problems we have identified. In this regard we also note that [✂].

136 We have considered the BSkyB/ITV and Ryanair/Aer Lingus merger cases in developing early thinking on partial divestment. We note that these cases considered the level at which *'material influence'* could be exerted by the shareholder.

137 We note that both the BSkyB/ITV and Ryanair/Aer Lingus cases required the divesting party not to seek or accept board representation.

**8.114** In Chapter 6 (see paragraph 6.141 to 6.142) we acknowledged the potential benefits to financial stability arising from common ownership. These potential benefits arise if it is less costly for PSPs to achieve their financial stability objectives through common ownership than through contracting with a third party provider. As part of our overall proportionality assessment we will want to consider this issue further.

**8.115** We note that our requirements on purchaser suitability would likely focus on two areas: resilience and competition. Therefore, it is reasonable to expect that a purchaser that can satisfy both the Bank of England (as the relevant authority responsible for financial stability) and the CMA (as the relevant merger authority) on these issues will satisfy us.

**8.116** If this remedy is assessed to be both effective and proportionate we will then consider the appropriate timing for any divestment. This period would need to be sufficient for shareholders to achieve the market value of the asset. We welcome additional stakeholder feedback on the effectiveness and proportionality of the remedy options we have identified, as well as whether (and if so, what) governance changes at the operators would be an effective remedy.

### *The remedy package as a whole*

**8.117** Stakeholders also commented on the package of remedies as a whole. Their views are summarised below.

#### *Stakeholder views*

**8.118** The majority of stakeholders that commented on the remedies package as a whole considered that the proposed package would be effective in addressing the problems identified in the interim report. Two stakeholders supported the remedies package but had concerns about the implementation and sequencing of the remedies. Considering that individual remedies would not be necessarily effective, one respondent did not believe that the package of remedies would effectively address the issues we identified, and proposed an alternative remedy package altogether (see paragraph 8.122).

**8.119** The majority of stakeholders believed that the package should be implemented in its entirety for individual remedies to be fully effective. For one central infrastructure provider, to enact the entire package would make it easier for alternative infrastructure providers to compete, and would thus expand the pool of potential bidders. Another infrastructure provider warned that excluding any one remedy would reduce the effectiveness of the package. Two respondents argued that remedies would be effective regardless of the divestment of the ownership of VocaLink.

**8.120** Three respondents said that no additional costs and benefits should be considered for the package as a whole.

**8.121** Two stakeholders did not see any potential unintended consequences. Two other stakeholders did:

- One operator said there may be unintended consequences from opportunity costs or 'planning blight' arising from regulatory constraint or accelerated timescales that may crowd out developments oriented to service-users.
- One PSP said that the remedy package should not penalise smaller banks by imposing disproportionate costs or resource constraints.

**8.122** Three stakeholders proposed alternative remedy packages that they believed were equally effective but less costly and intrusive:

- Two central infrastructure providers proposed a package of remedies aimed at reforming the contracting model between PSP, operators and infrastructure providers.
- Lyddon Consulting proposed a remedy package including measures to ensure interoperability, to unbundle VocaLink IT topology and to reform the current Bank of England Settlement Account policy to allow all licensed PSPs to have settlement accounts.

**8.123** On the sequencing of remedies:

- Two infrastructure providers said that divestment should be implemented first, followed by interoperability and then by competitive procurement. One of these also said that activities to implement the remedies will need to be run in parallel. The other also envisaged that operator reform and direct contracting would be required before the competitive procurement remedy is implemented.
- One direct PSP recommended implementing the interoperability remedy first, followed by competitive procurement. It said that the divestment remedy should then only be implemented if the first two remedies did not deliver the expected benefits.
- One infrastructure provider proposed implementing interoperability first, as it could be implemented without a change in VocaLink's ownership. It also said that divestment would need to occur before competitive procurement.

**8.124** Two stakeholders said that any implementation strategy should take into account all forthcoming commercial and regulatory developments for the UK payments system, financial institutions and retail banks:

- [✂] noted the UK Open Data Initiatives, the national transposition of PSD2, the implementation of EBA Regulatory Technical Standards, and the ring fencing of retail banking operations. In addition, it also added that banks will be undertaking change programmes to address their ageing and complex legacy technology systems, [✂].
- FPSL thought that the FPSL Access Programme and Future Clearing Model (FCM) could create logistical challenges for the implementation of the remedy package.

### *Our comments*

**8.125** As discussed in paragraph 8.13 above, we consider our remedies to be a package and our assessment of them will include an assessment not only of each element, but also of the effectiveness and proportionality of the package as a whole.

**8.126** We also note the importance of sequencing where we decide to adopt more than one remedy.

## Other alternatives

**8.127** We considered other options that we do not currently intend to pursue.

**8.128** To reduce VocaLink's incumbency advantage and maximise the potential number of interested parties in a competitive procurement exercise, we considered:

- **Ring fencing and separating the core contract function from other 'elective' or 'value-added services' provided by VocaLink, to enable more providers to compete for the contract:** We acknowledge that VocaLink provides a number of ancillary services that are not critical for central clearing.

**8.129** VocaLink said that a remedy to ring fence core infrastructure services from elective services would be difficult to monitor and enforce and may not be effective as it could distort competition in provision of these services.

**8.130** We acknowledge that this is a more complex option and may reduce a degree of flexibility in the services that infrastructure providers are able to offer under core services. We agree that it is likely to be difficult to monitor and enforce. We therefore do not intend to pursue it.

# 9. Next steps

During the next phase of this market review, we will:

- continue to engage with relevant stakeholders, including seeking views on the proposed remedies
- consider in more detail the different forms of remedy that could be adopted, taking into account the responses to our final report
- publish a draft remedies decision for consultation, including our assessment of effectiveness and proportionality

## Stakeholder feedback

9.1 We would like your views on the remedies, and options outlined.

9.2 Please send your comments (in either electronic Word or PDF versions) by 22 September 2016 to infrastructurereview@psr.org.uk.

Or in writing to:

Infrastructure Review Team
Payment Systems Regulator (15th floor)
25 The North Colonnade
Canary Wharf
London E14 5HS

## Further work planned

9.3 We will develop our thinking on the remedies, deciding in what form the remedies would be most effective in promoting competition, innovation and the interests of service-users. We will also assess the effectiveness and proportionality of the remedies proposed.

9.4 In doing this work we will consider your comments to this final report, as well as comments received previously when preparing our remedies consultation.

## Final report

9.5 We expect to publish the remedies consultation later in the year.

9.6 We will then, if appropriate, issue a decision on proposed remedies or actions in early 2017.

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