

Competition and Innovation in the UK's New Payments Architecture

Call for input

January 2020

We welcome your views on this call for input. If you would like to provide comments, please send these to us by **5pm on 24 March 2020**.

You can email your comments to PSRNPA@psr.org.uk or write to us at:

PSR Pay.UK/NPA project team
Payment Systems Regulator
12 Endeavour Square
London E20 1JN

We will consider your comments when preparing our response.

We will make all non-confidential responses to this call for input available for public inspection.

We will not regard a standard confidentiality statement in an email message as a request for non-disclosure. If you want to claim commercial confidentiality over specific items in your response, you must identify those specific items which you claim to be commercially confidential.

We may nonetheless be required to disclose all responses which include information marked as confidential in order to meet legal obligations, in particular if we are asked to disclose a confidential response under the Freedom of Information Act 2000. We will endeavour to consult you if we receive such a request. Any decision we make not to disclose a response can be reviewed by the Information Commissioner and the Information Rights Tribunal.

You can download this call for input paper from our website:

www.psr.org.uk/psr-publications/consultations/new-payments-architecture-call-for-input

We take our data protection responsibilities seriously and will process any personal data that you provide to us in accordance with the Data Protection Act 2018, the General Data Protection Regulation and our PSR Data Privacy Policy. For more information on how and why we process your personal data, and your rights in respect of the personal data that you provide to us, please see our website privacy policy, available here: <https://www.psr.org.uk/privacy-notice>

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1 Introduction

Overview

- 1.1** This document is part of the development of our policy for the future regulation of the New Payments Architecture (NPA). We are asking for stakeholders' views about possible competition issues, so that we can provide greater clarity about the nature of regulation that might be applied to the NPA.
- 1.2** The NPA will be the payment industry's new way of organising the clearing and settlement of most of the UK's domestic interbank payments, including payments that currently use the Bacs and Faster Payments systems. This replacement payments architecture was proposed by the Payments Strategy Forum, comprising a representative group of industry stakeholders, in response to our request that they develop a long-term strategy for the UK payments industry to meet existing and emerging user needs.¹
- 1.3** The ambition underpinning the NPA is to:
- enable competition between existing and new payment services
 - facilitate innovation in the interests of users
 - enhance resilience and security in payments
- 1.4** The NPA is an important part of how we are delivering against our objectives in respect of promoting competition, innovation and the interests of service-users in payments. As the payments industry regulator, we have a number of responsibilities, including regulating Pay.UK and its delivery of the NPA, and considering how we would regulate the activities of the new payment systems when they start operating.
- 1.5** This document is focused specifically on competition and innovation in the NPA. It is also a critical requirement that the NPA is secure and resilient.
- 1.6** In June 2017, we directed the operator of Bacs and FPS, Pay.UK, to competitively procure a replacement for these payment systems. Pay.UK proposed to comply with our directions by procuring replacement infrastructure for FPS and Bacs that is consistent with the ambition of the NPA. The Payments Strategy Forum handed over responsibility for developing and delivering the NPA to Pay.UK in December 2017.
- 1.7** Pay.UK completed the first phase (pre-qualification questionnaire), of a five-stage competitive procurement process for the NPA central infrastructure services (CIS), in March 2019 and is currently finalising the second phase (request for information). As this procurement process continues, Pay.UK will make a range of decisions about the NPA's CIS provider, technical design, and governance arrangements.

1 The Payments Strategy Forum's website is: <https://www.paymentsforum.uk/>

1.8 In January 2018, we sent Pay.UK² an open letter setting out our expectations about how they would manage the competitive procurement process.³ We followed that up with a second open letter in May 2019.⁴ The second open letter articulated:

- some competition issues that could materialise in the NPA, depending on the outcome of Pay.UK's NPA CIS procurement
- our expectation that, at an appropriate point in its procurement, Pay.UK demonstrate to us how it proposes to mitigate those issues
- that we will consider whether to take any further regulatory action

The purpose of this call for input and next steps

1.9 As noted above, this document is part of the development of our policy for the future regulation of the New Payments Architecture (NPA). We are asking for stakeholders' views about possible competition issues, so that we can provide greater clarity about the nature of regulation that might be applied to the NPA.

1.10 Stakeholder feedback will help us develop our NPA regulatory policy, which we plan to set out in a policy consultation and then final statement published before the end of 2020 (coordinating with Pay.UK's NPA CIS procurement timetable as appropriate). Our aim is be as clear as possible about the likely form of any future regulation, so that bidders and Pay.UK can take this into account before the end of Pay.UK's procurement.

1.11 The first step of this work is to identify the risks to competition that might exist. We will then consider the best way of mitigating these risks, and the way in which the PSR's regulation might improve outcomes. These mitigations could take a number of forms, including provisions in the contract with Pay.UK, the technical design of the infrastructure and the governance arrangements of the infrastructure provider.

1.12 In drafting this document, we have set aside the question of whether any mitigations in place in the current pre-NPA market are effective in reducing the potential harms identified in this paper. However, the question of the effectiveness of any current mitigations will form part of the analysis we undertake to develop our NPA regulatory policy consultation, and we would welcome any views on this.

1.13 We are keen to hear from all interested parties, including, but not limited to:

- users of payment systems (including representative bodies)
- payment service providers (PSPs) (current and prospective)
- participants in the NPA CIS procurement, including bidders and Pay.UK

² At the time, Pay.UK was known as the New Payment Systems Operator (NPSO).

³ Our January 2018 open letter can be found here: www.psr.org.uk/psrs-open-letter-new-payment-system-operator-nps

⁴ Our May 2019 open letter can be found here: www.psr.org.uk/psr-publications/news-announcements/psr-open-letter-payuk-may2019

1.14 The call for input is open until 5pm on 24 March 2020.

1.15 The remainder of this document is set out as follows:

- **Chapter 2** outlines some hypotheses about possible harms to competition and innovation.
- **Chapter 3** sets out possible mitigations to those harms.
- **Chapter 4** lists key questions for stakeholders about these harms and possible mitigations.

2 Competition issues

Design principles of the New Payments Architecture

- 2.1** One of the main features of the industry-proposed design of the NPA is a simple (or 'thin') common central infrastructure that provides basic interbank clearing and settlement-related services that enable one payment service provider (PSP) to make a payment to another PSP.
- 2.2** This proposed design increases the range of activities that can be competitively offered by multiple service providers who may use access to the NPA CIS as an input for the services they provide.
- 2.3** If the NPA is developed in this way, a range of suppliers could offer competitive 'overlay' services⁵ to PSPs (such as banks) and/or directly to payments account holders.
- 2.4** The provision of the NPA CIS will be separate from the control of the rules and standards that apply to the services that will be delivered to the NPA's users. As the organisation responsible for setting and administering the rules and standards, Pay.UK will contract with the NPA CIS provider.
- 2.5** The precise design of the NPA (including the where the boundary lies between the 'monopoly' provider of access to the NPA CIS and 'competitive provision' of other services) will be determined in part by decisions made in the procurement process.

The NPA in the context of the wider payments landscape

- 2.6** In addition to the NPA, the wider payments landscape is changing in other ways. For example, the second Payment Services Directive (PSD2) and Open Banking will facilitate the emergence of new services which could make competition *between* separate infrastructure/service combinations increasingly possible by making them more substitutable from the perspective of payers and payees.
- 2.7** As the economic regulator monitoring Pay.UK's development and delivery of the NPA, we want to see the NPA being delivered in a way which supports the development of innovation and competition between different types of payments and payment systems, and drives better outcomes for users.

⁵ For example, services leveraging the increased data capacity of the ISO20022 payment messaging standard that the NPA CIS will use.

Our approach so far

- 2.8** We recognise that decisions made during this procurement could affect how competition develops and our view on whether regulation is required and if so in what form. We have publicly set out our expectations in the open letters sent to Pay.UK.
- 2.9** In our first letter, we set out a number of issues that we wanted Pay.UK to consider. This included assuring it has 'minimised the risk of the winning bidder using its unique position to affect competition in related markets (such as overlay services in the NPA)'.⁶
- 2.10** In our second open letter, we expanded on this point and identified two scenarios which, in principle, give rise to competition issues:
- **Scenario 1:** The NPA CIS provider also (either directly, or indirectly through commercial interests in other businesses) provides overlay services in the NPA.
 - **Scenario 2:** The NPA CIS provider also (either directly or indirectly through commercial interests in other businesses) provides other payment services outside the NPA ecosystem that could be substituted for services that will be provided within the NPA ecosystem.
- 2.11** We identified six broad ways that effective competition might be adversely affected by the behaviour of the CIS provider:
1. Exploiting first-mover advantages to raise barriers to entry for others.
 2. Overcharging for access.
 3. Distorting prospective third-party competitors' access to the central infrastructure.
 4. Gaining unfair commercial advantage through knowledge of competitors' commercial strategies.
 5. Abusing access to and use of NPA payments data to its advantage.
 6. Discriminating against services provided in the NPA in favour of a (prospectively) substitutable service outside the NPA ecosystem in which it has a commercial interest.
- 2.12** Competition issues arising in scenario 1 stem from the *vertical* relationship between the provider of the NPA CIS and the providers of other services which use NPA CIS access as an input.
- 2.13** Competition issues arising in scenario 2 stem from the (prospective) *horizontal* competition between NPA services and services supplied through other payment systems (e.g. card payment systems) and the potential for the NPA CIS provider to affect the development of effective competition between payment systems.
- 2.14** Finally, there are issues that arise irrespective of scenario 1 or 2 above. These issues are related to the fact that the NPA CIS is likely to have monopolistic characteristics: as the only enabler of access to the NPA CIS, the CIS provider will generally not be subject to competitive constraints within the NPA for the duration of the contract.

⁶ PSR January 2018 open letter, Annex paragraph 1.15.

Scenario 1: vertical competition issues

- 2.15** If the NPA CIS provider also wants to provide overlay services which require access to the NPA CIS, it is likely to have an incentive, and may have the ability, to favour its own services over those of competitors. Such discrimination could take the form of one or more of the following:
- V1.** The NPA CIS provider may have access to information about the capabilities and/or development of the NPA earlier than other overlay service providers (OSPs), and/or access to information not available to other OSPs. Such differential access to information could give the central infrastructure provider a first mover and/or long-term advantage in the market for overlay services.
 - V2.** The NPA CIS provider will face marginal access costs, whereas a competitor could be charged a price which is higher than the marginal access cost. This potential difference in cost could give the NPA CIS provider an advantage in the provision of overlay services.
 - V3.** The NPA CIS provider may engage in non-price discrimination by, for example, refusing to respond, responding more slowly, putting in unnecessary hurdles, or behaving in other ways that slow down the introduction of services (innovative or otherwise) by third-party service providers. The NPA CIS provider may respond more favourably to requests from the 'in-house' overlay service provider as opposed to other users of NPA outputs.
 - V4.** The NPA CIS provider's overlay business could use access to information about competitors' plans to its advantage, either by blocking such developments or by introducing competing services earlier than it would or could otherwise have done.
- 2.16** When the NPA CIS provider has an economic interest in the supply of overlay services, it is likely to have an incentive to exploit any advantages. The significance of this will depend on the benefits that it could derive balanced against the financial, legal or reputational costs. The benefits to the NPA CIS provider are likely to vary between overlay services, depending on the intensity of competition and the profits the NPA CIS provider would stand to make from dampening that competition.

Scenario 2: horizontal competition issues

- 2.17** The NPA CIS provider might also have an economic interest in a different payment system that competes or has the potential to compete with the NPA interbank system. In which case, there are potential 'horizontal' competition concerns. The NPA CIS provider might have the incentive and ability to discriminate against parties requiring access to the NPA CIS by:
- H1.** Using commercial information gained from operating the NPA CIS to design new services, pre-empting the provision of competitive services. This is similar to vertical issue V1.
 - H2.** Delaying or preventing the provision of innovative end-user services where these compete with, or could compete with, services supplied using the alternative payment system. This is similar to vertical issue V3.

H3. Degrading the quality of service of the NPA infrastructure, as experienced by providers of end-user services, thereby giving alternative systems an advantage.

2.18 The strength of the infrastructure provider's incentives to take advantage of such features will depend on the nature of competition in the different markets in which it operates.

Monopoly issues

2.19 In addition to any interest the NPA CIS provider has in related markets, risks also arise due to the monopolistic nature of NPA CIS provision. These risks include:

M1. The NPA CIS provider not effectively controlling the costs of initial investment and ongoing operation. This could lead to higher prices and therefore reduced entry by PSPs or OSPs, reducing the intensity of competition and innovation in 'downstream' markets.

M2. The NPA CIS provider doing little to support innovation or keep costs under control for the introduction of new services, dampening innovation and resulting in higher costs in the long term.

M3. The prices for accessing the NPA CIS being set in a way that distorts competition in related markets, either by pricing significantly above costs to all users or to a subset of users. This could reduce entry of PSPs or OSPs, reducing the intensity of competition and innovation in 'downstream' markets.

M4. Other price and non-price terms and conditions of access to the NPA CIS are unduly restrictive or set in ways which distort competition and innovation in related markets. This might arise, for example, if the terms and conditions offered for new access connections are too stringent, or if the access conditions offered to similar types of participants differ substantially.

2.20 A well-designed and executed procurement process could, in principle, mitigate the risk of M1: assessment of the bids will include consideration of build and run costs, as well as control of cost overruns. However, any changes to design or capability required after contract award would be more difficult to mitigate through actions taken in the procurement.

2.21 The risks of M2 to M4 arise because the NPA CIS provider is unlikely to be subject to effective competitive constraints during the duration of its contract. A well-run procurement could mitigate some of these risks. The risks could also be addressed, in part, through Pay.UK's setting of appropriate terms and conditions of access, including price and non-price terms.

2.22 Given Pay.UK's ongoing competitive procurement, we do not concentrate on the above monopoly risks in the mitigations section below; we instead focus on potential mitigations to the competition issues identified in scenarios 1 and 2. Pay.UK and the NPA CIS provider will, however, need to assure us that they have implemented necessary measures to reduce the monopoly risks outlined here as part of the procurement process. We are interested in stakeholders' views on how effective these measures may be and the likelihood that further intervention by us may be required (see questions in Chapter 4).

3 Potential mitigations to the competition issues in scenarios 1 and 2

Potential mitigations

- 3.1** The competition issues identified in scenarios 1 and 2 can be mitigated by removing or reducing the NPA CIS provider's incentive and/or ability to engage in those behaviours.
- 3.2** Mitigations can take many forms ranging from, for example, ensuring appropriate technical design of the NPA and/or implementing strong governance arrangements (enforced through contractual provisions where appropriate) to removing or reducing the economic interest of the NPA CIS provider in overlay markets or competing payment systems through a form of separation.

Technical design of the NPA

- 3.3** The technical design of the NPA should facilitate competition and innovation. For example, implemented appropriately and with the right governance, open standards and application programming interfaces (APIs) would help to facilitate interoperability and substitutability of payment instruments.
- 3.4** We expect this type of mitigation would be 'built in' to the NPA during the NPA CIS procurement and written into the functional and technical specifications for the central infrastructure.

Governance design of the NPA

- 3.5** The governance of the NPA could constrain the behaviour of the NPA CIS provider by disincentivising or preventing it from engaging in the behaviours outlined in Chapter 2.
- 3.6** We use the term 'governance' in a broad sense, including:
- who makes decisions for each aspect of the NPA delivery and operation (or example service quality, pricing and setting/changing technical standards)
 - the basis on which those decisions are made
 - opportunities (if any) for parties other than the decision-maker to influence those decisions
 - the way in which decision-making rules and procedures are set out in the documentation between Pay.UK and the NPA CIS provider to assure non-discriminatory conduct
- 3.7** Where appropriate and proportionate, these arrangements might be set out in the contractual provisions agreed between Pay.UK and the NPA CIS provider.

3.8 For example, whether the NPA CIS provider could use the process of granting access as a barrier to competition and innovation would be influenced by:

- who the decision-maker is
- the basis on which access is given
- any existence of mechanisms to ensure non-discriminatory conduct

Removing or reducing economic interest of the NPA CIS provider in overlay markets or competing payment systems through separation

3.9 Competition concerns could be reduced or eliminated by requiring the NPA CIS provider to have no economic interest in either the market for NPA overlay services or any other payment system that could compete with NPA services.

3.10 We recognise that such prohibitions could have disadvantages. For example, there may be efficiencies in the provision of overlay services in the NPA by the NPA CIS provider, or in having a NPA CIS provider with experience of providing other payments infrastructures. The more intrusive any proposed remedy, the more consideration needs to be given to proportionality.

3.11 There are other mitigations that involve a lesser degree of separation but might reduce the competition concerns. These include:

- a. A joint venture (JV) with another independent entity that has no commercial interests that raise horizontal or vertical competition concerns. Such an arrangement would need to materially dilute the economic incentives for the JV entity to behave in the ways outlined above. Such an arrangement might also require rules to limit information flows across the boundary between the JV and other activities undertaken by the partners or related entities (see below).
- b. Legally separate entities with a common owner, with rules that apply across the boundary.
- c. Operationally separate entities within the same legal entity, with rules that apply across the boundary.
- d. Accounting separation.

3.12 As indicated above, these approaches would require rules to be applied across the boundary between the provision of the NPA CIS and the activities of service provision using NPA CIS access and other payment systems offering competing services. Appropriate rules could include:

- a. A requirement that access to the NPA CIS is provided on equal (price and service-quality) terms to all PSPs and OSPs.
- b. A requirement that services that are provided by any entity that also provides the NPA CIS are not cross-subsidised.
- c. A restriction on the transfer of information from the NPA CIS provider to other parts of the entity (particularly an overlay service provider and any part concerned with an alternative payment system).

- d. A requirement that the NPA CIS provider activities have operational independence from related activities (vertical and/or horizontal) and, in particular, that the decisions relating to the NPA CIS part of the entity are based on meeting the objectives of that part of the entity and (where they conflict) not on the objectives of the overall entity.

3.13 The effectiveness of such rules would of course be impacted by the framework put in place to monitoring and enforcing them.

Our consideration of mitigations

3.14 We expect that Pay.UK and the NPA CIS provider will take steps to address the possible harms we have identified, and we will consider whether the mitigations they introduce for a particular harm are sufficient. Given the importance of the NPA, we will have a significant ongoing monitoring role and, if appropriate, we may still use our regulatory tools to better ensure the possible harms are reduced or removed.

3.15 There are costs and benefits associated with all the approaches above. The balance between these will depend on:

- a. The nature and scale of harm to end users that is likely to arise from *not* mitigating competition issues.
- b. The costs and other potential negative consequences (if any) of applying any particular mitigations.
- c. The likely efficacy of the mitigations applied.
- d. The costs of monitoring and enforcing the mitigations to the regulator and other affected parties.

3.16 We have a range of powers, including powers under the Financial Services (Banking Reform) Act 2013, that allow us to monitor payment systems, to give directions to any participant in a regulated payment system or to require disposal of an interest in a regulated payment system (including the disposal of an interest in an infrastructure provider to the system). In determining our regulatory approach, and deciding if and how to use our powers, we will take into account all relevant issues and information available at the time, including issues of proportionality and the need to balance outcomes in relation to all of our statutory objectives.

4 What we are seeking from stakeholders

4.1 We would appreciate feedback on all the issues raised by this document. We are particularly interested in views and/or evidence in relation to the following questions.

4.2 Questions related to competition and innovation:

1. We have set out a number of hypotheses about how the ownership of the NPA CIS provider might adversely affect competition and innovation. Have we missed any?
2. How likely or unlikely do you think it is that each hypothesis would materialise in practice, and why? What factors could affect whether these harms materialise?
3. For the hypotheses which you think are likely to materialise in practice, how significant or harmful would they be to effective competition and innovation in the payments industry, and why? Are there any in particular that you think would cause particularly significant harm? How might you or your business be affected?

4.3 Questions related to potential mitigations:

4. Are there any types of mitigations that would help alleviate the harm identified that we have not described? In suggesting any new mitigations, please specify how they would help you or your business, or why they would facilitate competition and innovation more generally.
5. Are any of the types of mitigations we have described likely to be particularly effective or ineffective at alleviating the potential harms, and why?
6. Are any of the types of mitigations that we describe particularly costly or high risk? If so, please explain why.
7. Are any existing mitigations, to any similar concerns in today's pre-NPA payments ecosystem, particularly effective or ineffective in alleviating the potential harms? If so, please explain why.

4.4 You can answer as many or as few of the questions as you wish. We welcome all responses to the document, including less formal responses such as emails, bilateral or multilateral discussions on any issue arising from the paper.

Next steps

4.5 We welcome responses to this document by 5pm on 24 March 2020. While we have set this deadline, this should not prevent stakeholders from responding ahead of this date. Furthermore, stakeholders will have further opportunities to engage with us on this work, including at the time of our consultation on our draft policy statement. Please note that we generally seek to publish written responses (particularly more formal responses) in full or in part.

4.6 You can email your response to PSRNPA@psr.org.uk or write to us at the following address:

PSR Pay.UK/NPA project team
Payment Systems Regulator
12 Endeavour Square
London
E20 1JN

4.7 As well as seeking written responses, in order to facilitate engagement with our work and our analysis and evidence gathering, we intend to discuss these issues with interested stakeholders.

4.8 Following our consultation and stakeholder engagement on this paper, we plan to publish non-confidential responses (particularly more formal responses). Stakeholder feedback will help us develop our NPA regulatory policy, which we plan to set out in a draft policy statement and then final statement published before the end of 2020 (coordinating with Pay.UK's NPA CIS procurement timetable as appropriate). Our plans include a period for consultation on a draft policy statement. We will set out a timetable in more detail once the procurement timetable is settled.

Disclosure of information

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

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

4.10 We will not regard a standard confidentiality statement in an email message as a request for non-disclosure. If you wish to claim commercial confidentiality over specific items in your response, you must identify those specific items which you claim to be commercially confidential.

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4.12 We take our data protection responsibilities seriously and will process any personal data that you provide to us in accordance with the Data Protection Act 2018, the General Data Protection Regulation and our PSR Data Privacy Policy. For more information on how and why we process your personal data, and your rights in respect of the personal data that you provide to us, please see our website privacy policy, available here: <https://www.psr.org.uk/privacy-notice>.

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