

# Incentivising investment in an account-to-account alternative to cards and direct debits

Economic market characteristics and proposed approach

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Independent report prepared for Natwest

All views expressed are those of Diktyo Economics Ltd.  
Authored by Tanja Salem with input from Prof. Sean Ennis

[tanja.salem@diktyo-economics.com](mailto:tanja.salem@diktyo-economics.com)

# Contents

1 Executive summary .....	1
2 Background .....	3
2.1 This report .....	3
2.2 Policy context .....	3
3 The emerging framework, commercial model and key challenges .....	5
3.1 Institutional framework .....	6
3.2 The current commercial model and API pricing envisaged .....	8
3.3 Key challenges .....	9
4 Payment schemes: priced as multisided platforms .....	13
4.1 Competitive dynamics .....	13
4.2 Platform access pricing before tipping .....	14
4.3 Platform access pricing after tipping .....	15
5 An independent profit-driven scheme can align incentives .....	15
5.1 Essential requirements .....	15
5.2 How these essential requirements can be addressed .....	16
6 No further intervention in cVRP pricing is needed today - clarity on the future approach is key .....	18
7 Other regulatory measures to help clear the path for A2A payments .....	20
7.1 Competitive access to mobile platforms with market power .....	20
7.2 Charges for Open Banking services used for payments .....	20
Annex 1. Glossary of terms .....	22
Annex 2. FCA Vision for Future Entity .....	23
Annex 3. Comments on JROC Pricing Principles .....	23
Annex 4. Potential additional clarifications needed .....	26
Annex 5. Endnotes .....	27

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## 1 Executive summary

The UK Government's ambition is to build a trusted, world-leading payments ecosystem where consumers and businesses benefit from choice, innovation, and resilience. Account-to-account (A2A) payments are core to delivering it, as they can offer a competitive alternative to cards.

Open Banking has played a key role in this. Triggered by the CMA's 2017 retail banking remedies and EU payment rules, it enabled customers to safely connect authorised Payment Initiation Service Providers (PISPs) to their bank account to make one-off A2A "single immediate payments" (SIPs), on their behalf, for free. Government, regulators and industry stakeholders have since sought to develop a viable commercial model for variable recurring payments (cVRP), that have the potential to compete with card schemes.

Development of the commercial model has been undertaken against a backdrop of regulatory supervision, influenced by 2023 regulatory pricing principles (the 'JROC Pricing Principles') that consider each bank as a monopoly access provider to each of their customers' bank accounts.<sup>1</sup> Two economic studies (Frontier on behalf of Open Banking Limited, and UK Finance) recommended pricing options applying these pricing principles.

This paper identifies some inherent challenges with the current approach that risk undermining rather than incentivising the development of cVRP as a viable alternative to card payments and proposes a possible way forward. It builds on the Government's National Payments Vision (NPV) which concluded that *"current economics create a lack of incentives for data holders to drive, invest and support the development of Open Banking beyond the regulatory minimum established in the CMA Order. ... To unleash the potential of Open Banking, sustainable commercial arrangements are needed. The provision of any additional or 'premium' services beyond the scope of the CMA Order should be subject to a commercial model whereby data holders are incentivised to innovate and invest. The government intends to support this through the incoming regulatory framework."*<sup>2</sup>

### **We see two key challenges with the current approach**

**First, the focus on banks as bottleneck monopoly providers to each of their customer's user data may not be an optimal response to the government's National Payments Vision (it also predates it).**

The central problem the vision is trying to solve is how to develop a cVRP scheme that aligns the incentives of banks and PISPs to make it a commercially successful rival to card schemes. The focus therefore needs to shift from the current approach, that assumes bank participation, to the question of how to incentivise the development of a new payment method (that inherently requires commitment from both sides of the market). Without resolving the question of incentives there is a risk that participants with weak incentives treat it as a compliance exercise which may not be conducive to securing upfront commitments to invest. For example, banks face increased costs and risks (stranded investments, and cannibalisation of existing revenues from card payments), but limited control or certainty over their future

returns, including cost recovery. There is also the risk that card schemes get there first, with Visa and Mastercard already testing the market.<sup>3</sup>

**Second, the current process to achieving commercial alignment relies heavily on stated preferences (rather than revealed preferences) to resolve coordination and hold-up challenges.**

With the current process, economic consultancies are asked to pick their way through the stated preferences of banks and PISPs, to sketch out a commercial model that represents a compromise arrangement, in the form of a multilateral agreement (MLA). This has been a slow and complex process and has raised competition law concerns. We know from the economic literature that revealed preferences are a more reliable indicator of reality than those that are stated. Enforceable contracts are one way around this. Another challenge is hold-up problems, where a firm needs to make relationship specific sunk investments without having certainty that they will yield a commensurate revenue stream in future. Long-term contracts (and other mechanisms) can help overcome these types of challenges, but they require commercial flexibility and agility, which the current process may not cater for.

**We propose an independent, profit driven scheme with greater commercial freedoms and agility than the current process allows for, alongside timely competitive access to mobile platforms by alternative mobile wallets.**

**Success depends on balancing incentives across payers, merchants, banks, and payment services initiation providers (PISPs). A model with an independent, profit-driven scheme in the driving seat is most likely to achieve this.**

As a nascent scheme looking to compete with cards, it lacks market power and must be free to tailor pricing and user experience to grow. Instead of signing up to an MLA that reflects an uneasy compromise between the stated preferences of stakeholders with divergent interests, a scheme entity should be empowered to contract independently and directly with each bank and PISP. This way, the scheme entity will be able to identify the revealed (i.e. real) preferences of each market participant including through long-term contracts and ensure that sufficient incentives exist for them to help make cVRP a commercial success with merchants and payers.

**Beyond a high-level statement around the objectives that such a scheme should seek to achieve (in line with the National Payments Vision), no further regulatory intervention in cVRP pricing should be necessary today. Only if (or when) the scheme becomes so successful that it acquires market power, should further intervention on pricing be considered.**

Clarity on the future approach, however, is likely to be needed to mitigate regulatory risk today. To ensure regulatory predictability and stability from the start, an upfront regulatory commitment of what such intervention in pricing would look like will be needed and should be developed (akin to the 'fair bet' approach in telecoms). This could include tailoring the JROC pricing principles to the objectives

of the National Payment Vision and market characteristics (including placing greater emphasis on payment schemes' multisided nature).

**Other changes including regulated access to mobile platforms with entrenched market power are likely needed quickly to clear the path to success.**

If cVRP is to extend to in person point-of-sale payments, access to mobile devices on competitive terms will be required. To this end, the FCA and PSR should work closely with the CMA to ensure that access to mobile devices for wallets offering A2A payments constitutes part of the conduct requirements imposed on Apple and Google. In addition, while SIPs are in many respects an inferior proposition to cVRP, to the extent banks remain under a regulatory mandate to process SIPs for free, this may act as a drag on the potential of cVRP to develop as a successful rival to card payments. Subject to further analysis, the phase out of free access to bank APIs for SIPs may be needed (to the extent possible without undermining legitimate commercial expectations of PISPs and without causing undue consumer harm).

## 2 Background

### 2.1 This report

Natwest engaged diktyo economics to examine (i) the challenges encountered by stakeholders in coordinating a commercial approach to Account-to-Account (A2A) payments, (ii) how commercial incentives could be most effectively aligned to create a commercial scheme as an alternative to cards, while (iii) ensuring merchants and consumers are protected from the exercise of market power in payments over the longer term.

We take a fresh look based on general economic principles, as well as learnings from other sectors, in particular telecoms and digital platforms. While this paper does not represent the position of Natwest or any other party, we hope that this is a valuable independent contribution to the current debate.

This report does not opine on the question of whether, or how, the commercial solution could be adopted in a way that complies with competition law. The scope also does not include Open Banking APIs where used for purposes other than A2A payments (e.g. budgeting apps etc.).

### 2.2 Policy context

The Government's ambition is to create a *"trusted, world-leading payments ecosystem delivered on next generation technology, where consumers and businesses have a choice of payment methods to meet their needs."*<sup>4</sup> To this end, Government, in its National Payments Vision, set the strategic direction that the regulatory framework must be clear, predictable and proportionate and that payments runs on resilient infrastructure that supports innovation, competition and security. Seamless account-to-account payments (A2A) are seen to play a 'crucial' role in this, giving *"greater choice to consumers and merchants in how they make and receive payments."*<sup>5</sup>

The vision's implementation envisages building on the mechanisms established through Open Banking.<sup>6</sup> Originally triggered by a CMA market investigation into retail banking in 2015-2017, Open Banking aimed to help customers compare different retail banking propositions more easily.<sup>7</sup> The UK implementation of EU payments services rules, motivated by a desire for a competitive alternative to cards, then strengthened the Open Banking framework.<sup>8</sup>

Open Banking – which has been implemented by Open Banking Limited (OBL) - enables customers to consent to third-party providers (TPPs) accessing their payment account to view their account information and / or make payments on their behalf. This enables, amongst other things, single immediate payments (SIP)<sup>9</sup>.

Customers who wish to pay by SIP must authorise each individual transaction using a link sent to them, or by scanning a QR code. The user experience is considered insufficiently seamless to encourage merchants and consumers to use it at scale. To date SIPs have only been adopted by merchants who can tolerate a degree of friction in their customer journey, for example Ryanair. Importantly, SIPs also do not come with any of the payment protections or customer dispute mechanisms that customers are used to in respect of card payments.

Commercial Variable Recurring Payments (cVRP) sit outside of the 2017 CMA Order and the Payment Services Regulations,<sup>10</sup> and as such, there are no prescribed limits on what banks can charge to offer them. Unlike SIPs, cVRPs will allow customers to authorise multiple recurring payments to the same merchant, leading to more seamless customer journeys for multiple payments. Work is also underway to introduce customer protections for cVRPs. It is envisaged to be introduced in two phases:

- **Wave 1** - comprising 'low risk' use cases such as payments to utilities (including fixed and mobile telecoms) rail companies, regulated financial services firms, pension schemes, mortgages, e-money institutions authorised by the Financial Conduct Authority (FCA), government (central or local), public bodies, and registered charities.
- **Wave 2** - envisaged to ultimately extend cVRP to wider e-commerce providers (and, potentially in the future, in-store payments). This wave will require the development of appropriate customer protections.

For Wave 1 to be successful, merchants, i.e. the utilities, rail companies and others, will need to incur the cost of transitioning to accepting a new payment method. For that to be the case they will want to be confident that (i) it enhances rather than disrupts their customers' journey and/or (ii) it is less expensive to them than existing payment schemes.

The development of e-commerce payments through Wave 2 could generate competitive pressure on the card schemes, where the Payment Systems Regulator (PSR) found that *“given the widespread use of Mastercard and Visa in the UK, their cards are must-take for merchants in the UK”* and that *“existing alternative payment methods to cards do not exert effective competitive constraints on the fees charged by Mastercard and Visa for scheme and processing services.”*<sup>11</sup>

However, the PSR reports in its market review statement on card scheme and processing fees that *'even [the more positive views expressed by some stakeholders implied that competition [of open banking] with card payments was not expected in the short term. ... Even with proper regulatory intervention to mandate the major banks to facilitate A2A payments, many stakeholders consider that it will take a few years for effective competition with cards to emerge.'*<sup>12</sup>

The obstacles cited by the PSR to further development of Open Banking were functional and performance related, with an *'[a]symmetry of costs and incentives within the ecosystem' ... considered a fundamental impediment to the expansion of open banking payments into areas such as e-commerce, broader account-to-account retail transactions (A2ART)...'*<sup>13</sup>

The Garner review in November 2023 made a related point:

*"Feedback is consistent that new payments approaches can only thrive when they have both a sustainable commercial model and adequate consumer protection. Without a sustainable commercial model, there is no money to fund adequate consumer protection and infrastructure investment. Open Banking's current economics create no incentive for their providers to drive, invest and support it, and no margin to invest in consumer protection."*<sup>14</sup>

This report considers how current plans for a cVRP scheme could be augmented to drive greater payment volumes more quickly; while ensuring consumers remain protected should a scheme gain market power in future. It is structured as follows:

- **Section 3** summarises the current institutional framework envisaged and key challenges.
- **Section 4** provides an overview of the economic characteristics of payment systems.
- **Section 5** proposes how incentives could be better aligned through a single, commercially empowered scheme.
- **Section 6** considers how competition and consumers could remain protected in the long run without regulatory intervention on pricing today.
- **Section 7** sets out other regulatory measures that could help clear the path for A2A payments, including competitive access to mobile platforms with market power.

### **3 The emerging framework, commercial model and key challenges**

In June 2023, before the publication of the Garner review, the Joint Regulatory Oversight Committee (JROC) for Open Banking issued 'Principles for commercial frameworks for premium APIs' (the JROC Pricing Principles). They had as their objective, *"a sustainable, safe, commercial model that results in account-servicing payment service providers (ASPSPs) and third-party providers (TPPs) agreeing prices*

*that (i) offer fair value; (ii) are transparent and promote competition; and (iii) take into consideration the need to protect consumers and firms from harm, including the effects of cyber and financial crime".<sup>15</sup>*

The JROC Pricing Principles reflect an assumption that every account-servicing payment service provider (ASPSP) is a monopolist in a relevant market for each of their account holders' data. In December 2023,<sup>16</sup> the PSR proposed that it should develop an MLA that sets a central regulated price, that would be cost orientated (and zero for low-risk use cases), and that it should mandate the participation of the CMA9 banks. The proposals received significant levels of stakeholder push-back.<sup>17</sup>

In November 2024, the Government published its National Payments Vision, which affirmed Joe Garner's findings a year earlier, and proposed the development of an industry led approach, while handing over primary responsibility to the FCA.<sup>18</sup> In January 2025, the FCA and PSR announced the creation of a new legal entity to coordinate how variable recurring payments are made.<sup>19</sup>

This section sets out:

- the current institutional framework envisaged including how common technical standards are envisaged to be set,
- the commercial model considered and specifically the pricing of bits of software, referred to as Application Programme Interfaces (APIs), that give payment initiation providers (PISPs) read- and write access to bank accounts so they can trigger payments to merchants, and
- some of the challenges remaining.

### **3.1 Institutional framework**

Current proposals by Open Banking Limited (OBL) for cVRP Wave 1, and the proposals published by UK Finance for Wave 2 in April 2025, anticipate a for-profit scheme entity with around thirty-one shareholders operating the commercial industry VRP scheme.<sup>20</sup>

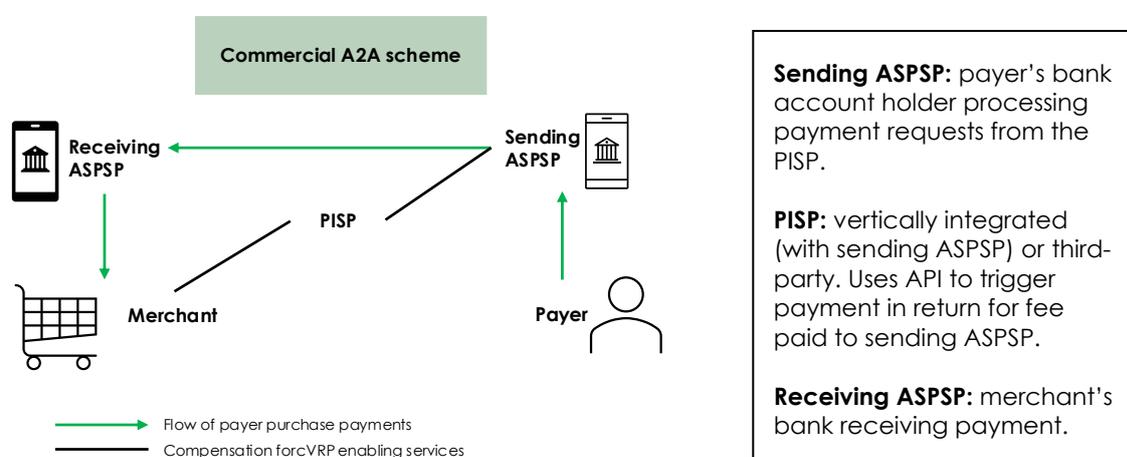
Central to this would be a Multilateral Agreement (MLA) between ASPSPs, PISPs and the scheme entity made up of a Participation Agreement, a Rulebook, and Schedules to those rules. It also envisages that the precise commercial model setting (amongst other things) the remuneration of ASPSPs by PISPs for the APIs necessary to action payments will be added to the MLA.<sup>21</sup>

Following the completed implementation of Open Banking under the CMA Order, the intention of JROC and the NPV is for the FCA to become the lead regulator to progress Open Banking. We are currently in a period of transition until the Long-Term Regulatory Framework ('LTRF') is put in place, which will provide the overarching regulatory framework for Open Finance. The LTRF is expected to be put in place as secondary legislation under the Data Use and Access Act (DUAA), which would then allow the CMA to commence the revocation process of the Part 2 Open Banking requirements. The FCA has recently announced its vision for a Future Entity to take forward Open Finance. The future entity (distinct from the for-profit scheme entity)

will replace OBL as the primary standard-setting body for open banking application programming interfaces (APIs) in the UK.<sup>22</sup>

The current model under consideration for cVRP is illustrated in **Figure 1** below. Payers will trigger payments from their bank accounts to merchants (say an energy provider, with bill payments depicted by the green arrows). A PISP<sup>23</sup> will enable the merchant to bill the payer (ultimately via the merchant's bank account). This could be through a QR code, or a link the merchant makes available for the payer so they can trigger payment on their mobile phone via the merchant's website, or an app accessed through a mobile device or a computer. In future, it might also work via an in-store card reader in the UK, as is already possible in e.g. Portugal where (both account-to-account and card) mobile wallet alternatives to Apple wallet have access to mobile phones' near-field communication chip (NFC).<sup>24</sup>

**Figure 1. Illustrative model for a commercial payments scheme<sup>25</sup>**



The remuneration of ASPSPs by PISPs is represented by the black line connecting PISP and sending ASPSP in the figure. PISPs in turn charge merchants for arranging the payment. The current expectation is that transfer of funds will be between the two ASPSPs - funds will not go through the scheme entity. But the scheme entity will be responsible for managing the MLA.

The illustration in **Figure 1** broadly aligns with the structure considered by Frontier Economics (see below), to facilitate comparisons, except that we have at the top of **Figure 1**, included a placeholder for a new scheme entity.

For the Frontier Economics study the new payments scheme at the top was not in scope. Relevant fees for the payment scheme were assumed to equal the existing Faster Payments (FPS) fee (per transaction) plus a range assumed for scheme fees to be paid to Open Banking for things like coordinating the setting of technical standards, operating the open banking directory, and compliance and monitoring activities.<sup>26</sup>

This model also does not take into account any fees that the receiving ASPSP may charge the merchant for processing an FPS payment, as part of the provision of a Business Current Account (BCA) service. Such fees are likely to form part of a separate market (e.g. the market for BCAs) recently found by the CMA to be characterised by increasing competition, and are outside the scope of this paper.<sup>27</sup>

### 3.2 The current commercial model and API pricing envisaged

#### **Frontier Economics proposals for Wave 1**

OBL commissioned a study from Frontier Economics to “develop and propose a methodology to establish a commercial model price or price cap for Wave 1 cVRP”<sup>28</sup> charges. Frontier Economics made the following recommendations for Wave 1 use cases “considering the FCA and PSR’s principles [the JROC principles] and practicality”:<sup>29</sup>

- PISPs (not payers) should be charged (to enable the scheme to become competitive against cards),
- MLAs embedding the commercial model are preferred to bilateral agreements between individual ASPSPs and PISPs (“as they simplify and reduce the cost of building a network for cVRP by avoiding multiple bilateral negotiations and are likely to be more effective in driving adoption ...and also likely disadvantage participants with less bargaining power (e.g. smaller PISPs)”)<sup>30</sup>,
- a single market price, for all use cases, identical for all merchants and PISPs, largely based on estimated unit cost (predicated on highly uncertain volumes) and set for approximately 5 years, and
- the MLA could be set as the only allowable price, or as a fall-back, albeit favouring the former as if a “fallback” approach is adopted we would expect it to be the price used in the vast majority of cases as any bi-lateral negotiation would lead to a worse outcome for one side”.<sup>31</sup>

#### **UK Finance proposals for Wave 2**

UK Finance in June issued a report providing an assessment of possible commercial models for Wave 2 use cases, also based on the JROC principles, aiming to “develop a successful commercial model that achieves high levels of usage, such that cVRPs become ubiquitous”, while “not speculat[ing] on or evaluat[ing] specific mechanisms for achieving this widespread ASPSP adoption (whether through the financial incentives provided to Payment Initiation Service Providers (PISPs) and ASPSPs, regulatory mandates or in other ways)”, also noting that “[t]his work will assume that all ASPSPs adopt cVRPs in the assessment and modelling of options.”<sup>32</sup>

The report evaluates different choices the commercial model could entail, including: the pros and cons of multilateral vs bilateral agreements, different types and levels of consumer protections, different ways of defraying the faster payments fee and the operator fee, the calculation basis of a per transaction fee, fees accounting for different levels of transaction risk, different possible fee trajectories over time, the possibility of discounts for PISPs based on volume, as well as fixed vs ad valorem fee structures and possible mixed models. The resulting analysis is a structured assessment informed by government policy documents, international benchmarks, and stakeholder consultation.<sup>33</sup> However, the report shortlists twenty-eight out of the thirty-two original choices, leaving much of the work to determine an actionable commercial model open.

Summarising at a very high level the UK Finance recommendations for Wave 2: they include a centrally-set fallback model, with the possibility of bilateral agreements,

greater flexibility vs Frontier Economics in how the “operator fee” (i.e. scheme fee) is defrayed between ASPSPs and PISPs, five different options for ASPSP fees from cost to value based (where value relates to merchant adoption incentives in some form), enabling reflection of transaction risk in the level of fees, discounts for PISPs based on volume, and different flavours of fixed vs ad valorem fees per transaction.

The differences between the Frontier Economics approach recommended for Wave 1 and the UK Finance approach in Wave 2 are anchored in the different use cases between waves. Wave 2 is envisaged to encompass riskier and more diverse use cases than Wave 1, and this generates a need for increased flexibility in the way in which differences in risk and value may be reflected in fees and fee structure.

### **3.3 Key challenges**

There is a public policy desire to incentivise investment in a commercial payment scheme and for it to grow into an alternative to cards. While progress has been made, ASPSPs appear to still have weak incentives to put their weight behind cVRP.

While there could also be extraneous reasons for this, below we consider possible challenges related to the regulatory approach and process. This may also limit the degree to which economic studies can cut through and move from balancing stakeholder views to recommending commercial decisions.

#### ***Viewing each ASPSP as a monopolist with regards to each of their customers does not align with the market in which policy is aiming to foster competition***

The JROC Principles recommend an approach to pricing consistent with what would – in other sectors – normally require a finding of market power, an adverse effect on competition (AEC) in a relevant market or markets while there has been no such finding in recent times.<sup>34</sup>

Borrowing a regulatory approach used in telecommunications, the JROC Principles assume that every retail bank is a ‘bottleneck’ controlling access to their customers (including customers’ user data). By this definition, every provider of a product with unique customer or usage data is a monopolist regarding that data.

There could be reasons why, on a case-by-case basis, it may be appropriate to set or cap charges on one side of a multisided market at cost, even where there is no market power in a relevant market or a relevant digital activity. However, this is more likely to be a special case than something that can be generalisable across the economy. Text Box 1 below provides two examples from telecoms markets where charges were capped at cost, and one where they are not, to help illustrate this. The first example, call termination, is one where the regulator explicitly decided to treat the market as one-sided to foster competition from entrants in the “primary market” for calls (more akin to the situation which triggered the 2017 CMA Order following findings of an Adverse Effect on Competition in retail banking markets, or AEC). The second example is one where the European Commission designated large online platforms as gatekeepers, but where Ofcom found that regulation was not warranted.

**Text Box 1. One-sided or multisided markets? Two examples from the communications sector.**

In telecoms, regulators have long treated markets as effectively a one-sided market. While consumers are free to choose a service provider, the regulator has capped charges networks charge each other to “terminate” – in other words deliver – calls to their customers on their respective network. This reflects the policy desire to ensure any caller can reach any called party on any network, and the resulting vulnerability of smaller e.g. entrant networks with very few customers, to the negotiating power of larger ones with large and established customer bases.

This is not necessarily always the right approach and there are diverging views. For example, when it comes to over-the-top service providers (in the UK) such as WhatsApp or Signal, consumers can ‘multi-home’. In other words, they can download both applications and switch between them, as they receive notifications from other apps depending on who contacts them and who they want to communicate with. While the UK regulator Ofcom did not impose obligations on OTT providers to interoperate, the EU Digital Markets Act (DMA) obliges gatekeepers (i.e. platforms fulfilling a set of quantitative thresholds indicating that they have an entrenched or durable position) to allow third party messaging services to inter-operate with them. This means, for example, that in the EU, WhatsApp users should in theory be able to receive messages from users of third-party messaging apps.

By virtue of the regulatory requirement that on a public telephone network any caller needs to be able to reach anyone else on the public telephone network, operators must negotiate and agree access as a condition of their license. With cVRP, merchants will have multiple alternative payment methods available to them, so they will only adopt a new option, cVRP in this case, if it delivers an improvement over cards, e.g. better conversion, compared to cards, other things equal (e.g. the cost to them); or lower cost at equal conversion. Should the scheme gain market power, for example if it gained material volume and became a ‘must-have’ for merchants, then regulation may need to kick in. Section 6 sets out a possible approach.

In payments, a regulatory focus on one side of the market only is unlikely to incentivise investment in a new entrant alternative payment scheme – i.e. comparable to a competing telephone network, or a new competing messaging service to WhatsApp. Hence cVRP is likely to require continued incentives for multiple sides of the market to participate in it, and to continuously improve the service it provides to merchants and payers. The regulatory mandates introduced through Open Banking that have required banks to offer free access to APIs for SIPs have so far not facilitated the creation of a commercial rival to cards. Unless banks are provided with commercial incentives, this may not change.

Furthermore, taking Frontier Economics' findings, for example, cVRP appears unlikely to be a platform with market power (at least not for a while). Considering the indicative findings from Frontier Economics, a cVRP payment scheme (as a multi-sided platform) would qualify as a nascent scheme at best. Frontier provides illustrative projected market shares of Wave 1 cVRP after five and ten years, under different volume scenarios.<sup>35, 36</sup> Even the most ambitious scenario modelled by Frontier Economics results in market shares well below 10% in years 5 and 10, for Wave 1. The future of Wave 2 cases is even more uncertain given it involves more demanding use cases from a consumer journey point of view and more risky ones from banks' perspective. As a result, mandated inter-operability on regulated terms including price are also likely to be inappropriate unless and until the scheme tips into market power (more on this in sections 5 and 6 below).

### ***Relying on stated preferences alone is unlikely to lead to commercially robust outcomes***

The approaches taken by Frontier and UK Finance also recognise that payment systems are multisided markets requiring merchants, PISPs, consumers and ASPSPs to participate for it to succeed. They recognise that critical mass is required (ideally all banks' but if not at least the CMA9), and that the scheme needs to be attractive to PISPs who serve as the connectors of the scheme to merchants. This means that there is a need for potential participants to coordinate.

However, having to rely on the stated views of around thirty-one stakeholders on what might work for them commercially and/or is perceived as fair in the context of the JROC principles has important shortcomings.

Reliance on stakeholder views rather than revealed preferences is a key weakness economics and behavioural science identify when considering how to treat information about likely future behaviour. Stated preferences are preferences revealed when individuals express views about how they would react if faced with a choice rather than – as would be the case for a revealed preference - being observed in how they actually respond to choices in real life.<sup>37</sup>

This is likely to be exacerbated by the complexity of the exercise at hand. For example, the UK Finance evaluation of commercial models for Wave 2 considers choices across 9 dimensions, with 3-6 design choices per dimension, i.e. a total of 35 choices across all dimensions, and over 150,000 permutations.<sup>38</sup> This is relevant because, complexity aside the choices in each dimension are unlikely to be independent of each other. For example, the transaction amount could be

correlated with multiple factors such as transaction risk, the value to the merchant of a specific future use case, and potentially also the way liability might be optimally shared. Therefore, the rationale for a particular charging method ultimately recommended might be reflected in different dimensions considered at the same time, thus potentially causing some factors to be considered multiple times with others given insufficient consideration. Stakeholder input on the choices in each dimension is unlikely to take this into account systematically. As a result, such a process may not facilitate reaching an internally consistent commercial model.

As we suggest in section 5, a central scheme and contracts are a way around that. While a firm may state that it cannot make a profit below price X, if the best terms on offer involve a price below X, the firm may nonetheless decide to commit to a contract if not offered an alternative. Similarly, if the firm chooses not to participate because the price isn't right given its business model, then the scheme will have to either find alternative commercial terms (e.g. better price, better price in return for e.g. volume discounts, a long-term volume commitment or similar) to attract it as a participant, or accept there might be one less scheme member.

Contractual agreements may be accompanied by statements of intent, but they do not carry the same level of commitment and tend therefore not to be treated as such. Of course, demand conditions and volumes might change, but a contract that commits parties to volumes ahead of time firstly ensures parties have given their best estimate and secondly, face the cost of getting it wrong. This in turn should also create greater incentives to produce better forecasts.

### ***Hold up problems may also be present***

The current process may also contribute to the reluctance of ASPSPs to commit to and make investments upfront. Incomplete contracts can prevent agreements from being struck in the first place. The classic example is the so-called hold-up problem where parties to a transaction must make non-contractible relationship specific investments before the transaction takes place, while the specific form of the optimal future transaction (e.g. volume) remains uncertain.<sup>39</sup>

This is likely to be an issue also in the present situation. The unit costs estimated by Frontier Economics vary widely, i.e. within a range of 3p to 11p per transaction depending on volume assumptions and the timing of cost recovery.<sup>40</sup> They could be higher if common costs were counted, too. With volumes forecast based on the stated preferences of ASPSPs and PISPs, actual variability in cost and volume could be even higher. In aggregate, these factors may make it difficult for banks to identify a clear commercial case for participation.

ASPSPs are currently asked to commit to investment in systems, user experience and potentially branding, with uncertainty over future cost recovery, including opportunity costs (as the scheme could impact existing revenue streams). ASPSPs are also asked to commit to these investments without the ability to set or vary the price unilaterally as new information about cost and demand become available: prices in Wave 1 are envisaged to be insensitive to volume and value, at least for a period of 5 years. At the same time, only scenarios that “*delay the recovery of*

*material costs including upfront investments and scheme costs... [are expected to] lead to cVRP being broadly competitive with debit and credit cards."*<sup>41</sup>

### **Competition law risks of multilateral commercial agreements could further stifle progress**

An additional concern stakeholders raised is that a multilateral agreement on commercial terms could breach Chapter I of the 1998 Competition Act. We have not considered the issue in detail but note the concerns as an additional headwind to the institutional structure and commercial agreements considered above.

In the next section we set out the economic characteristics of payment systems and implications for pricing. Then we consider an alternative – or potentially complementary - way of incentivising a new payment scheme to grow. The hope is that if developed further, such an approach may spark further thinking around how the challenges above could be mitigated if not overcome.

## **4 Payment schemes: priced as multisided platforms**

Payment schemes have long been described as two-sided markets, where the volume of transactions on, and the profit of a platform depend not only on the total price charged to the parties to the transaction, but also on its decomposition.<sup>42</sup>

This section:

- describes key competitive dynamics of payment schemes as a particular form of two-sided platform
- why access pricing should not be regulated unless there is a strong likelihood of its market power becoming entrenched.

### **4.1 Competitive dynamics**

Two- or multisided platforms are everywhere, and many of them compete vigorously. This could be where users on multiple sides of the platform 'multi-home' i.e. use several platforms at the same time and can easily switch between them to engage with the other side of the market.<sup>43</sup> The extent and intensity to which a platform's behaviour is disciplined by competition tends to depend on:

- the ability of all sides to multi-home, i.e. to technically, contractually, or otherwise deal with several platforms, and
- the degree to which each side can switch between platforms.

If a platform is a 'must-take' for any side of the market, it is likely to possess market power: the market could be said to have tipped in favour of that platform. It is possible for markets to tip in favour of more than one platform. The PSR has found that Visa and Mastercard are both must-takes for a material number of merchants.<sup>44</sup> The dynamics behind this can be illustrated through the following example: a card issuing bank with a 10 percent market share might issue cards through one scheme (scheme A) only, and offer no other equivalent means of payment (e.g. an alternative card scheme, or A2A). Another bank with a 15 percent market share

may only use scheme B. In this case merchants may face a stark choice: offer their customers the option to pay via both scheme A and scheme B or miss out on transacting with either 10 or 15 percent of bank account holders.<sup>45</sup>

A new entrant A2A payment scheme would not be a must-have from the start. It might or might not become one in future. This will depend on how the market evolves. For example, if banks who adopt the scheme continued to issue cards, then it may not become a must have for merchants, if merchants could walk away from the scheme in response to poor terms or quality, and rely on cards instead. This is an empirical question and would need to be considered depending on how the market evolves.

If all major banks offered A2A payments, and the user experience and price is competitive compared to Visa- and Mastercard, merchants might offer both payment by card and payment via A2A (especially if set up costs are low). Merchants will be incentivised to steer customers to the option with the best user experience and the lowest price.<sup>46</sup> In addition to enabling consumer choice, this would exert greater competitive pressure on Visa- and Mastercard and so could mitigate (if not resolve) the PSR's current competition concerns regarding the card schemes.<sup>47</sup>

## **4.2 Platform access pricing before tipping**

In determining access prices - both in commercial and regulatory settings - the interactions between the different sides and the value each side brings to the platform need to be 'priced in'.

This means that price will vary to an extent according to the inverse elasticity of demand of users on each side of the market. A non-technical way to describe elasticity of demand is simply the price sensitivity of a customer. While sometimes not known with precision, the better a platform's data, and knowledge of their customers, the more precisely they will be able to estimate and/or judge this.

The greater a user's price sensitivity is, the less the user values, needs or depends on the platform. In turn, this depends on the (i) intrinsic value of the platform to the user, as well as (ii) the potential alternatives available. If there are alternative platforms to choose from, the user is likely to be more price sensitive, all other things equal.

Nascent platforms will be more likely to gain traction in the market, the better they are able to tailor their offerings including use case, design, user experience, pricing etc. to the individual customer (or customer group). This could include charging (or paying) less to one side of the market than the other or differentiating terms including price between individual users and use cases. This would help the platform gain scale and become more attractive to all users. Regulators should not intervene in pricing except in circumstances where there is at least a reasonable expectation of the platform tipping in the foreseeable future with a risk of its market power becoming entrenched.

### 4.3 Platform access pricing after tipping

The same pricing incentives that lead platforms to become viable in the first place, can also lead to detrimental outcomes once the platform has gained market power. Interventions in price and other terms might then be justified and be designed to mimic pricing under workable competition. In other words, pricing should avoid rewarding undue market power. Section 6 addresses the longer-term risks of market tipping and how to put safeguards in place from the start to ensure all stakeholders have clear expectations about the long-term regulatory approach.

But first we look at how to maximise the prospects for success of a new payments scheme.

## 5 An independent profit-driven scheme can align incentives

In the following we propose an alternative model (or potentially a complement if used e.g. for Wave 2 only) to that considered in section 3. We put the characteristics of payment systems as a multisided platform (as set out in section 4) front and centre. This section is structured as follows:

- essential requirements for a scheme to be successful and
- possible contractual ways of addressing them including what such a scheme could look like.

### 5.1 Essential requirements

Because there are established schemes (e.g. cards) which benefit from network effects, a new scheme can only become viable in this space if it can challenge the existing schemes successfully. To this end, a new scheme will need the capability to develop the following essential requirements:<sup>48</sup>

- **A critical mass of sending ASPSPs will need to give read and write API access to PISPs for cVRP.** Without critical mass (which is unknowable ex-ante but is estimated to be anywhere between 50% and 80% of market coverage)<sup>49</sup>, merchants will hesitate to incur the costs of investing in the commercial relationship with a PISP. This may require integrating the PISP's service in their online shopping and check-out experience or, potentially, investing in an in-store payment device so customers can use it to authorise payment in store. To enable critical mass in participation, the scheme will need to navigate both hold up (see section 3 above) and free riding risks.
  - i. Hold-up risks can be mitigated by enabling the scheme to design appropriate contracts and by mitigating regulatory risk (see section 6 on the need for regulatory clarity and predictability). For example, long-term contracts (including potentially volume commitments by PISPs) could help derisk low API charges in the early years while volumes are low (as the Frontier study set out, as the level of take-up of the new scheme increases, unit costs will fall).

- ii. Free riding is a risk that could arise where some ASPSPs or potentially PISPs delay participation in the expectation that they could join later, at a lower cost (and/or risk). For example, ASPSPs might delay until the risk of participating is lower. PISPs may hold out because they might consider that SIPs might be a viable alternative, etc. These dynamics might prevent a scheme from gaining critical mass, but e.g. longer-term contracts and differential terms e.g. better for early adopters vs late-comers, can help.
- **Seamless and secure customer journeys, combined with effective customer protection and trust.** Payers and merchants will only invest in adoption if they are confident the new payment method is secure, easy to use, and consistent across different banks. It will be important to develop effective standards that will need to be followed by almost all participants, nearly all the time.
  - **An attractive value proposition to merchants.** Unless an A2A scheme can offer equivalent or higher customer checkout conversion rates than a card scheme, the A2A price point will need to be lower than the comparable card scheme price point.
  - **Agility will be needed to respond optimally to market signals, to recalibrate trade-offs over time.** There will be a need to optimise the trade-offs between security, quality of customer experience, and pricing over time. For example, if banks are liable for fraud, the amount they will tolerate will be contingent on the amount of revenue they can generate from the payment to cover the fraud risk. If they cannot generate sufficient revenue to cover the risk, they may increase fraud controls which could, in turn, add friction to the customer journey. In addition, pricing and standards will need to evolve in tandem with changing consumer needs, technology, and merchant requirements.

## 5.2 How these essential requirements can be addressed

We have identified three different contractual types that could be deployed to develop the essential requirements outlined above:

- **Multilateral agreement between all participating ASPSPs and PISPs.** Agreement between all participants in the platform to enable all transactions between them. To enable a clear comparison, we assume that there is no scope for bilateral (as above) or individually tailored (as below) terms alongside this multilateral approach.
- **The platform (or scheme entity) reaches individual tailored agreements with each ASPSP and PISP.** The platform is in the driving seat. It sets or negotiates the standards and/or commercial terms on which transactions on the platform are made, with the long-term objective to make the platform as profitable as possible.
- **Bilateral agreements between ASPSPs and PISPs,** to enable a transaction between them via the platform. For example, the platform could serve to connect two participants, but the terms on which they connect and transact are determined bilaterally (the platform might charge a fee, e.g. like eBay, but it's up to the seller and the buyer to agree a price for a trade to happen).

We view the optimal structure as one in which the scheme entity takes the lead, on both standards and commercial terms. This requires a pivot away from the current multilateral approach, while retaining much of the work already undertaken.

**As regards standards**, multilateral approaches are often optimal in setting industry standards because they distribute decision-making power more evenly, increasing legitimacy and the willingness of firms to adopt (in telecoms the GSMA is a leading example). They can also help avoid standards from being shaped by stronger market participants (which could potentially result in excluding rivals). However, their downside is that they can be slow and bureaucratic. While it makes sense to conduct a multilateral exercise to develop initial scheme rules, to ensure an agile approach once the scheme is operational and growing, the scheme entity needs to have a final say over their evolution, especially those that have a direct impact on the commercial value proposition for cVRP.

**As regards pricing**, two-sided platforms require prices to be set responding to demand signals from participants on each side of the market. These demand signals need to be in the form of the revealed preferences that emerge during a bilateral contractual negotiation, as opposed to the stated preferences that emerge during a multilateral consultation exercise.

**The scheme entity should therefore be entitled to reach individual tailored commercial agreements with each user or group of users as it sees fit.** It should have to ability to adopt heterogeneous pricing structures (where some firms may prefer flat pricing, while others may prefer to negotiate volume discounts), to incentivise different categories of market participant. It should also be able to adapt terms for who carries liability when things go wrong, to ensure that responsibility sits with those best placed to control the risks.

Hold up challenges are more likely to be mitigated through bilateral contractual negotiation with a scheme entity that has skin in the game.

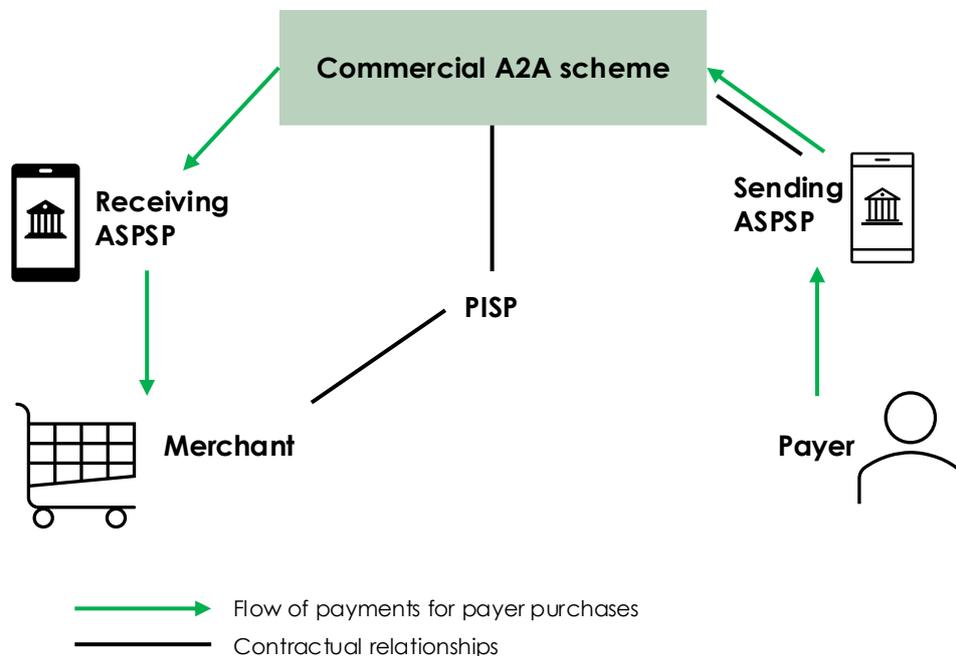
While there may be scope for bilateral agreements between parties to the scheme but outside the scheme e.g. between ASPSPs and PISPs directly, the scheme entity may need to restrict them. This is so free riding and hold-up problems can be mitigated given the impact such agreements could have on the incentives of e.g. ASPSPs and PISPs who contract via the scheme. For example, if an ASPSP and a PISP later agree a price for API calls bilaterally to capture a greater share of revenue this may change the return everyone else can expect to make from long-term contracts already struck. This restriction may not be necessary to be blanket or to remain in place forever, but it may be necessary to consider further.

**Figure 2** illustrates our proposed approach at a high level. The current approach (as set out in **Figure 1** above) entails ASPSPs and PISPs determining commercial terms in an MLA (with some limited scope for bilateral agreements).

The alternative approach would put the new independent payment scheme in the driving seat: participants on all sides of the market agree terms, including price, with the scheme. The scheme is incentivised by the profits it makes due to the volume and value of payments it processes overall. These, in turn are dependent on how

attractive the platform is to end users, i.e. payers and merchants as well as intermediaries including PISPs.

**Figure 2. An independent profit-driven scheme**



This is very similar to many multisided markets where the central platform must negotiate and agree terms with many users of the platform both on the seller and the buyer side. The platform is free to put users into segments and aggregate how to engage with them or to treat them on a bespoke basis, depending on what creates the greatest momentum to drive volume (of users and transactions) onto the platform. It will decide to do this in a way that is commensurate with the transaction costs it incurs by adopting a more aggregated approach vs. bespoke approaches depending on the situation.

Should this idea be taken forward, there will be additional issues to consider including if additional incentives are required to make the scheme a success. This could for example entail the scheme giving users on each side the opportunity to buy a stake in its success to provide the right incentives to participate it, and to ensure branding, marketing and user experience are optimised.

## **6 No further intervention in cVRP pricing is needed today - clarity on the future approach is key**

As stated in this paper, regulatory intervention may be required if any cVRP scheme acquires market power. As set out in section 3 above, a cVRP scheme would be nascent. As a result, there is unlikely a need for a regulator to intervene in price setting today.

Nonetheless, providing clarity today on what principles regulators may apply should a cVRP scheme tip to a position of market power would likely have a positive impact on incentives to participate in the first place.

In UK telecoms regulation, the "fair bet" principle is an approach used by Ofcom to balance investment incentives with its competition and consumer duties when regulating risky, long-lived network investments (particularly fibre). While the investment in A2A payment is not of comparable scale, the principle still holds. Under the fair bet, investors are given the opportunity to earn a return above the cost of capital over the lifetime of the investment project because they also carry the cost of downside risk if it fails.

Under the fair bet, price regulation is not triggered unless and until the investing firm has gained market power and potential harm to competition and consumers is likely on a forward-looking basis. An equivalent assessment could apply in the case of the new scheme, albeit likely more in line with the method the CMA uses to identify significant and entrenched market power ('SEMP') in online platforms given the multisided nature of the market.<sup>50</sup>

The key features of the fair bet are the period over which returns are assessed, the cost of funding at the time of the investment and the margin above cost allowed over the project lifetime. The period of assessment is the expected payback period. The margin allowed over and above the cost of funding is assessed by reference to the downside risks incurred at the time of the investment decision. So, for example, if the scheme's business case involved upfront costs that are expected to be recovered only later as volumes grow, any future capping of prices (if it becomes necessary) would account for the downside risk at the time of investment.<sup>51</sup>

This only works if the regulator or Government provide a credible upfront commitment to such an approach including the way in which it will be applied. In the absence of such a commitment, it may not be rational to invest. A commitment mechanism could, for example, be of statutory or contractual nature and/or underpinned by regulatory decisions including guidance.<sup>52</sup> Annex 3 makes some suggestions in terms of how the JROC pricing principles could be adapted to cater more clearly for the multisided nature of the market and Annex 4 considers additional clarifications that may be helpful.

## 7 Other regulatory measures to help clear the path for A2A payments

For the reasons outlined in the previous sections, we do not consider that regulatory intervention in pricing of cVRP APIs is warranted or desirable today to facilitate the development of a cVRP scheme.

In this section, we identify which interventions we think will likely facilitate the development of such a scheme: interventions to enable the use of mobile wallets for in person payments and changes to the SIP regime. There could be others, including the way in which a digital government id scheme may be rolled out or the plans for a digital pound. However, these are not in scope of this report.

### 7.1 Competitive access to mobile platforms with market power

For a nascent payment scheme to take off, it will require fair access to mobile platforms with significant and entrenched market power (SEMP). The effective and timely implementation of the CMAs proposed roadmaps for the regulation of Apple and Google's eco-system, published at the end of July are likely to be critical to this:

- Mobile phones are increasingly used to trigger electronic (i.e. non-cash) payments both online and in-store (including via pass-through wallets).
- Apple and Google (Android) control the mobile eco-systems consumers use.
- These eco-systems are complements rather than substitutes for merchants as consumers tend to have either a mobile phone with the Apple or with the Google eco-system, but not both.<sup>53</sup> Therefore, an A2A scheme looking to provide payment options to merchants will likely need to interface with both eco-systems.

Stakeholder discussions suggest that it may be possible to develop an A2A scheme for online payments without reliance on Apple or Google wallets. However, for in person payments, any cVRP scheme will need to be able to offer payments via contactless mobile wallets on Apple and Google devices.

While the CMA did not find Apple nor Google to have market power in relation to digital wallets themselves in the UK, the CMA provisionally concluded functionality key for digital wallets such as access to the NFC chip is covered by its SMS designation.<sup>54</sup> This would support the creation of new digital wallets for both Apple and Google ecosystems. Other measures, such as the ability of alternative wallet providers to steer customers to their wallet and to set it as a default, may also be needed.

### 7.2 Charges for Open Banking services used for payments

As noted in section 2 above, sending ASPSPs are required to provide third parties free read and write access to enable SIPs (as well as VRPs). This could disincentivise take-up of the new scheme as the older technology is provided for free even if the user experience and conversion rate of the new scheme is materially better.

However, withdrawing the obligations for free access to trigger payments may adversely affect businesses who may have built services on the premise of free

access. From an economic – and investability - point of view, this would matter if it undermined the predictability and stability of the existing regulatory environment. For example, industry participants may or may not have been able to anticipate that the measures could be withdrawn, either because former regulatory concerns were addressed or could be better met through other means. Similarly, consumers may be harmed if they do not wish to take up new services and old services are no longer available or available for free so this will need to be addressed when considering a transition.

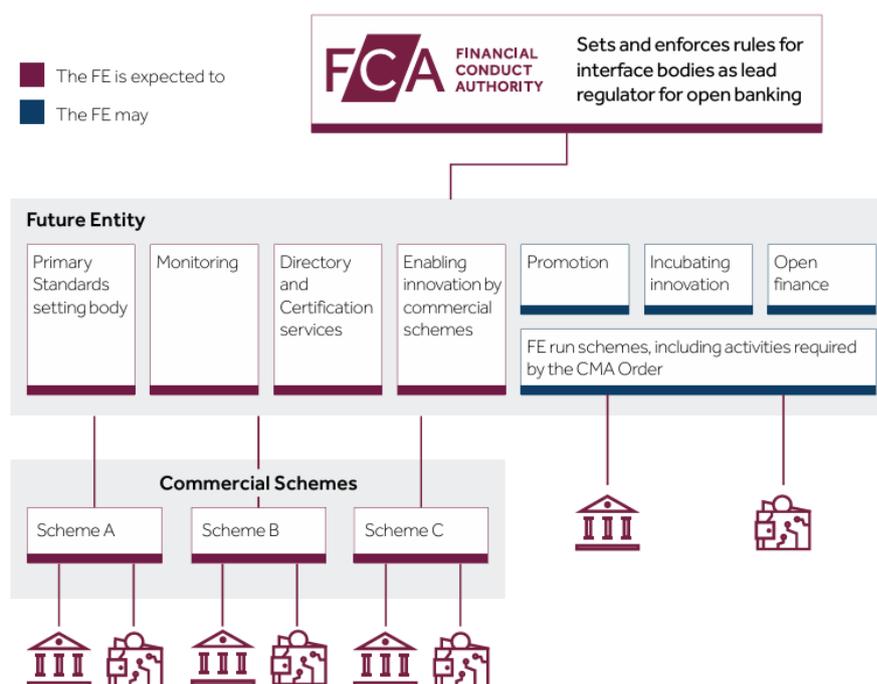
If charging for SIPs were agreed, then the phasing out could be linked to the development of a cVRP scheme with a clear and predictable glide path. A pragmatic solution could be to permit free SIPs to continue for the duration of any contracts that PISPs may already have entered into, while ASPSPs would be entitled to charge for any new contracts.

## Annex 1. Glossary of terms

Term	Definition
A2A payments	Account-to-Account payments direct from one bank account to another, without intermediation by a card scheme like Visa- or Mastercard, for example.
API	Application Programme Interface, a set of rules protocols and tools that allow one piece of software to communicate with another. In broad terms, it defines how requests are made, what data is exchanged and how responses are delivered.
ASPSP	Account Servicing Payment Services Provider i.e. usually a payer's retail bank
CMA	Competition and Markets Authority
FCA	Financial Conduct Authority
Merchant	The company receiving payment – term used in the context of card schemes less in account-to-account payments.
OBL	Open Banking Limited
PATS provider	Publicly Available Telecommunications Service provider
PISP	Payment Initiation Services Provider which could be vertically integrated with an ASPSP or a third party contracting with a merchant to enable them to receive payment from the payer (via the ASPSP).
PSR	Payment Services Regulator
SEMP	Significant and Entrenched Market Power: the first limb of the statutory test for designating a firm with Strategic Market Status (SMS) under the UK Digital Markets, Competition and Consumers Act 2024.
SMS	Significant Market Status – a designation applied by the CMA to large online platforms found to have significant and entrenched market power.

## Annex 2. FCA Vision for Future Entity

In its Feedback statement the FCA envisages that the Future Entity (FE) will: take the form of a limited company limited by guarantee, funded through collecting revenue on an equitable basis. As illustrated below, it will be responsible for setting common standards “that will provide a minimum level of service and interoperability across open banking services”.



The FCA also set out that the FE's role should not be split across two organisations (splitting infrastructure and standards setting & oversight) to avoid additional governance costs and challenges around coordination and alignment of objectives. It also expressed the view that FE not should take on roles where the market is likely able and incentivised to provide competitive services.

## Annex 3. Comments on JROC Pricing Principles

If cVRP is successful and becomes a viable competitor to Visa and Mastercard it could begin to exert market power and may require interventions to protect merchants or PISPs from high prices at that point, consistent with the fair bet set out in section 6. However, as per section 3 of the report, considering each ASPSP as a monopolist is unlikely to promote the objective of fostering competition between payment schemes. In the table below we considered how the JROC principles would need to be adapted if the fair bet triggers were met and price intervention considered necessary. The adaptations reflect the two-sided nature of the market more fully Last but not least, pricing in two-sided markets after a platform has established itself (and tipped) is likely to enable the regulator to identify the most effective and least distortionary way of determining access pricing including to

different sides of the market given the availability at that point of a history of pricing, pricing responses in terms of demand and competition.

**Figure 2. JROC pricing principles, rationale provided and key challenges**

#	Pricing principle	Rationale	Challenges
N/A	Assumption not principle: ASPSP monopolist for each account holders' data	<i>"TPPs, who need to access customer data to provide their services, must use the ASPSP servicing that customer. This is often referred to as a 'bottleneck monopoly'. This could place a TPP in a relatively weak bargaining position in relation to negotiating fees and charges placed upon it to access the customer's account by the customer's ASPSP. ASPSPs may exploit this position to charge a price above what could be considered fair value. This could, in turn, disincentivise TPPs from developing new products and services that rely on chargeable access to consumer accounts. It could also result in businesses and consumers paying inflated prices for the end products."</i>	<p>In a multisided market, alignment of prices to cost should be assessed across the platform rather than individual sides of it as a starting point (because charging structure is not neutral as set out in section 4 in the main report).</p> <p>Even if one were to consider pricing of APIs by ASPSPs to PISPs separately, the efficient price in a workably competitive market may be above or below (short or long-run) cost on either side of the platform.</p> <p>While intervening to cap prices through regulation on one side of the platform may be the right thing to do, a cost-based charge is not necessarily always the least distortionary (or most consumer beneficial) way of doing so.</p>
1	Reflect relevant long-run costs of providing premium APIs	<p>Part (A): ASPSPs: cost recovery in long run, not necessarily in the short run</p> <p>Part (B): PISPs/TPPs: 'fair value' = not more than ASPSP cost</p>	<p>As noted above, while 'reasonable relation to cost' is an important factor in multisided markets with a material share of common cost, assessing one side of the market at a point in time alone to assess reasonable returns may be distortionary.</p> <p>Part B of principle 1 is simply positing that the value to the PISPs must equal the cost to the ASPSP in competitive conditions without any explanation why. There are other ways to ensuring 'fairness' that come without the downsides (see our comment on Principle 4).</p>
2	Incentivise investment and innovation in premium APIs	<i>"The level of charges for premium APIs should enable the ASPSP to earn a return over the long run that compensates them for the risk associated with any investment and innovation, and reward them for innovations and associated investment that bring benefits to end users. ... We expect adherence to Principle 1 will help achieve this."</i>	Lacks recognition that cost-based caps on charges, especially where costs are incurred before they are made back will tilt risk against investment. Because early costs are high/common and volumes low and uncertain, a cap at cost today removes upside needed to justify risk (hence the tension between part (B) of principle 1 and principle 2). The fair bet as set out in section 6 could resolve this.
3	Incentivise take-up/ use of network effects	<i>"Encouraging the widespread adoption [including through pricing] of open banking across customers and businesses will be crucial to maximising its benefits."</i>	Network effects imply the decomposition of charges to the different sides of the platform matters: value-based pricing therefore likely to be necessary to drive take-up. Upfront investment in partnerships, brand, customer experience, and trust needed to drive take-up also suggest returns may come only years later. This challenges principle 1 Parts A and B.
4	Treat TPPs fairly	<i>"Premium API charges should be set to treat all TPPs fairly, without favouring or disadvantaging some against others. Any pricing that unfairly discourages entry and growth of TPPs or investment in open banking should not be taking place. This includes preferential pricing where an ASPSP charges a different price to its own integrated TPP than other competing TPPs."</i>	We agree that a concern about discrimination by a platform with market power could be resolved through a requirement for the same or equivalent terms between the downstream arm of the platform with SEMP on the one hand and the third-party access seeker. Use of competitive benchmarks may also help. Other interventions (such as strict cost-based access as per principle 1 should be considered only if there is evidence of this alone being ineffective in achieving regulatory aims.
5	Transparent fees and charges	<i>"Transparency and simplicity of pricing is important for ensuring a level playing field and incentivising the take-up of premium APIs and open banking."</i>	This could be important and may be necessary to support the effectiveness of principle 4. Will depend on the specific situation in which it applies.

## **Annex 4. Potential additional clarifications needed**

Below are initial areas where further clarification may be needed about the future regulatory approach, but there will be others:

- Should ASPSPs be allowed to recover the opportunity cost of giving API access to trigger payments under the scheme?
- Should the fixed and common costs of Open Banking be allowed to be recovered from participants of the new, commercial scheme?

### **Should ASPSPs be allowed to recover the opportunity cost of giving access?**

The opportunity cost to banks of participating in an A2A payment scheme includes revenues lost as a result of merchants migrating from the established card schemes to the new A2A payment infrastructure. In principle, where no market power has been found, opportunity cost should be compensated. This is efficient because it means that a new way of doing things or a new technology will only be adopted if it is a net improvement on the next best (existing) alternative.

Assuming interchange fees are capped at appropriate levels, inclusion of opportunity cost in the fee is efficient both from a banks' private perspective and from a competition and consumer perspective, subject to the considerations on the fair bet set out in section 6 above. Should cVRP become competitive with cards, and interchange fees be capped at appropriate levels, there are likely to be good incentives for ASPSPs to offer competitive API access terms.

### **Should the fixed and common costs of Open Banking be allowed to be recovered from participants of the new, commercial scheme?**

As set out above if, and when the scheme gains entrenched market power, regulation should be imposed mindful of the costs it incurred at the outset. In calculating this it seems that all costs incurred to create the scheme should be included, except costs that would have been incurred irrespective of its creation, i.e. the one-off fixed and common costs of complying with the CMA Order (during its duration) and the PSRs (while they remain in place).

As for on-going fixed costs that can be allocated to Open Banking activities as well as to the new scheme, they should be allocated based on the respective cost drivers. As for on-going costs common to both Open Banking and the new scheme, there are good reasons for these to be included although the extent to which this is done will depend on the impact it would have on the scheme's likelihood of success. This could be determined as part of the detailed future institutional and regulatory design of the scheme. For example, if the scheme were allowed to contribute little or nothing toward the on-going common cost of future Open Banking services or infrastructure it might use, then this could derisk the investment and should be considered in the assessment of lifetime returns under the fair bet (in the form of lesser upside allowed before price intervention is considered).

## Annex 5. Endnotes

<sup>1</sup> JROC (2023), [Principles for commercial frameworks for premium APIs](#), June, ('JROC Principles')

<sup>2</sup> HM Treasury (2024), [National Payments Vision](#), November, paragraphs 3.27-3.28

<sup>3</sup> See for example: [Account to Account | Visa](#) and [Mastercard Sandbox Allows Experimentation into the 'Art of the Possible' for the UK National Payments Vision | Mastercard Newsroom](#), last accessed 24 September 2025. The proposal for a scheme in this paper assumes it would be a nascent scheme, independent of established schemes.

<sup>4</sup> HM Treasury (2025), [National Payments Vision](#), November, p. 7, ('National Payments Vision').

<sup>5</sup> *ibid* p.9.

<sup>6</sup> [Payments Vision Delivery Committee Update - GOV.UK](#), last accessed 5 September 2025.

<sup>7</sup> The CMA found adverse effects on competition in the supply of retail banking services to personal current account customers and to small and medium-sized enterprises in the UK. CMA (2016), [Retail banking market investigation - Final report](#), Paragraphs 13.1 ff, [Regulatory - Open Banking](#), last accessed 5 September 2025 and [The Retail Banking Market Investigation Order 2017](#), last accessed 5 September 2025.

<sup>8</sup> [Directive \(EU\) 2015/ of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation \(EU\) No 1093/2010, and repealing Directive 2007/64/EC](#), implemented in the UK via [The Payment Services Regulations 2017](#), last accessed 15 September 2025.

<sup>9</sup> [Variable Recurring Payments \(VRPs\) - Open Banking](#) last accessed 5 September 2025; for SIP see: [Types of Faster Payment transactions - Pay.UK](#) (see also PSD2 Articles 66 ff. [PSD2](#)).

<sup>10</sup> The Payment Services Regulations 2017 (SI 2017/752) implemented EU PSD2 and, after Brexit, were retained in UK law (with targeted amendments).

<sup>11</sup> PSR (2025), [Market review of card scheme and processing fees - Final report](#), March, paragraph 1.10

<sup>12</sup> PSR (2025), [Market review of scheme and processing fees - Annex 1](#), paragraph 1.287-1.288

<sup>13</sup> *ibid.*, paragraph 1.276.

<sup>14</sup> Garner, J. (2023), [Future of Payments Review report.pdf](#), p.72.

<sup>15</sup> JROC Principles, paragraph 1.1 and 2.2.

<sup>16</sup> PSR (2023), [Expanding variable recurring payments: call for views](#), December.

<sup>17</sup> PSR (2024), [CP23/12 Expanding VRP stakeholder submissions](#), August.

<sup>18</sup> [National Payments Vision](#), paragraph 3.32, last accessed 25 September.

<sup>19</sup> [FCA and PSR set out next steps for open banking | FCA](#), last accessed 7 September 2025.

<sup>20</sup> <https://www.openbanking.org.uk/news/firms-agree-to-fund-key-activities-to-create-new-company-to-deliver-the-initial-phase-of-work-for-commercial-variable-recurring-payments/>, last accessed 6 September 2025 and UK Finance (2025), [Open Banking payments commercial model For Wave 2 cVRP - Initial Findings](#), report commissioned by UK Finance from Deloitte, referred to as UK Finance (2025) below.

<sup>21</sup> [OBL launches public consultation on the MLA for commercial variable recurring payments - Open Banking](#), last accessed 6 September 2025.

<sup>22</sup> FCA (2025), [Feedback Statement FS25/4: Design of the Future Entity for UK Open Banking](#).

<sup>23</sup> This could be a third party PISP, or a PISP vertically integrated with a bank.

<sup>24</sup> [Pagar.com MB WAY - Pagar.com o Telemóvel](#), and [MB Way enables NFC payments on iPhone](#) last accessed 8 September.

<sup>25</sup> [Payments Vision Delivery Committee Update - GOV.UK](#), updated 15 July 2025, last accessed 11 September.

<sup>26</sup> Today, Open Banking runs on the Faster Payments retail payment infrastructure (administered by Pay.UK on behalf of the banks). It is not clear currently to what extent this will continue.

<sup>27</sup> While we have not undertaken an analysis of retail banking, we note that in August this year the CMA proposed to remove behavioural undertakings on the four largest UK banks on the basis that they are no longer necessary in light of increased competition. CMA (2025), [Review of the SME banking \(behavioural\) undertakings 2002, provisional decision](#), 13 August.

<sup>28</sup> Frontier Economics (2025), [The commercial model for variable recurring payments – wave 1](#), 9 April, last accessed 5 September 2025. Referred to as Frontier (2025) below.

<sup>29</sup> *ibid*, p.9

<sup>30</sup> *ibid.*, p.10.

<sup>31</sup> *ibid.*

<sup>32</sup> UK Finance (2025), p.5-6.

<sup>33</sup> *ibid.* p.16

<sup>34</sup> Frontier Economics note that ASPSPs involved are operating in competitive markets “providing payment services either on a standalone basis or as part of a wider bundle of services (such as part of a personal current account)” and that “[t]here is competitive pressure in these wider retail banking markets and we would expect that ASPSPs are in general strongly incentivised to provide their payment services in a cost efficient way”, p.49.

<sup>35</sup> “The Wave 1 total is calculated by summing volumes across all Wave one use cases (utilities, government, regulated financial services, e-money charities and rail). Wave 1 payment volumes are concentrated in utilities and financial services across all payment types. For example, 55% of Wave 1 Direct Debits come from utilities, and 30% from financial services, with smaller shares in government (10%) and charities (4%). Debit and credit cards on file follow a similar pattern, with around 60% of Wave 1 volumes from utilities and 30% from financial services, and the remainder mostly from charities. Rail has a negligible share across all payment types.” Frontier (2025), Table 23.

<sup>36</sup> *ibid.*, Table 25

<sup>37</sup> Much of the related work on this topic is about consumer choice, dating back to Samuelson, P. A. (1938), “A Note on the Pure Theory of Consumer’s Behaviour.” *Economica*, 5(17), 61-71; since then, the issue also has been studied in the context of inter-firm contracting. See e.g.

<sup>38</sup> *ibid.* See p. 9 of the report for an overview. Number of choices per dimension multiplied to give the permutations:  $3 \times 3 \times 3 \times 3 \times 6 \times 4 \times 4 \times 5 \times 4 = 155,520$ .

<sup>39</sup> I.e. delaying cost recovery lowers price in the first 5 years while volumes are low. For more context on the hold-up problem see e.g.: Schmitz, P. W. (2001), *The Hold-Up Problem and Incomplete Contracts: A Survey of Recent Topics in Contract Theory*, MPRA Paper No. 12562, last accessed 15 September 2025.

<sup>40</sup> *ibid.* p. 13

<sup>41</sup> *Ibid.* p.14.

<sup>42</sup> See for example Schmalensee, R. (2002), [Payment Systems and Interchange Fees](#), *Journal of Industrial Economics*, 50: 103-122, [Rochet J. and J. Tirole \(2003\), Platform competition in two-sided markets](#), *Journal of the European Economic Association*, Volume 1, Issue 4, June, pp. 990–1029.

<sup>43</sup> Bedre-Defolie, Ö, Nitsche, R. (2020), [When Do Markets Tip? An Overview and Some Insights for Policy](#), *Journal of European Competition Law & Practice*, Volume 11, Issue 10, December, Pp. 610–622,

<sup>44</sup> “Given the widespread use of Mastercard and Visa in the UK, their cards are must-take for merchants in the UK. As a consequence, Mastercard and Visa must be offered by all acquirers, which would otherwise face, as one acquirer put it, ‘critical and existential losses.” PSR (2025), Market review of card scheme and processing fees - Final report, March 2025, paragraph 1.10.

<sup>45</sup> See Rysman, M. and Wright, J., [The Economics of Payment Cards](#) *Review of Network Economics*, vol. 13, no. 3, 2014, pp. 303-353. and Rysman, M. (2009), [The Economics of Two-Sided Markets](#), *The Journal of Economic Perspectives*, 23(3), 125–143.

<sup>46</sup> This could be the case, for example, if the same point of sale terminal or software can be used for different platforms but there could be other relevant dynamics.

<sup>47</sup> This assumes that inter-change fees, of which banks get a share, are regulated at levels consistent with workable competition. See also section 6 below.

<sup>48</sup> The below builds on some of the observations made by Oxera (2023), [The \(unmet\) potential of Open Banking - Towards a system that provides incentives for all participants](#), 4 July.

<sup>49</sup> I.e. exceeding the market share of the four largest retail banking groups in the UK: Lloyds, Barclays, HSBC and Natwest who collectively have a share of around 70-75%. Challengers like Monzo, Starling, Revolut and Chase UK accounting for most of the remainder although many challenger current accounts are secondary accounts with primary accounts held by one of the big 4. See: [UK Current Accounts Market Report 2024 | Mintel Store](#); and [Five common banking mistakes – and how to avoid making them | Banks and building societies | The Guardian](#), last viewed 20 July 2025.

<sup>50</sup> [Digital Markets Competition Regime Guidance](#), last accessed 11 September 2025.

<sup>51</sup> See for example: Group (2020), [BT response to Ofcom’s consultation on promoting competition and investment in fibre networks - Wholesale Fixed Telecoms Market Review 2021-26](#), 13 May and Oxera (2017) [“Does Ofcom’s approach in the WLA market review honour the fair bet principle?”](#)

<sup>52</sup> See also BT Group above (section 3 of the report). The concept of regulatory expropriation is particularly well defined in an international investment context (but not be limited to this area), e.g. Reinisch A, Schreuer C. (2020) *Expropriation*. In: *International Protection of Investments: The Substantive Standards*. Cambridge University Press; 2020:1-250 and Schreuer C. (2006), [The Concept of Expropriation under the ECT and other Investment Protection Treaties](#), in: *Investment Arbitration and the Energy Charter Treaty 108-159* (C. Ribeiro ed.), accessed on 3 August 2025.

<sup>53</sup> Accent (2025), [Mobile consumer survey](#), July; survey commissioned by the CMA “to understand smartphone users’ attitudes and behaviours in relation to their smartphone preferences and use of apps”, p. i and pp. 66-67.

<sup>54</sup> CMA (2025), [Strategic Market Status Investigation into Apple’s Mobile Platform](#), Proposed Decision, paragraph 4.62 (a).

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