Transforming the UK’s Payments Infrastructure

An independent paper setting out how to build commercial parity between card scheme and account-to-account rails that creates better outcomes for consumers and merchants

From a group of members of the Advisory Board of The Payments Association

Introduction

The Payments Association’s Advisory Board (AB) is made up of executives elected by the payments community. Recognising the current debate on the future of money movement in the UK, several AB members are now questioning the adequacy of the part of the nation’s payment infrastructure that underpins payments between accounts. Their concerns are mirrored by the Economic Secretary to the Treasury’s in her foreword of the UK’s National Payments Vision that stress the need to decide on the best ‘approach to vital upgrades that are needed to the UK’s underlying payments infrastructure’[1].

This paper sets out to provoke interest in a new approach to the challenges posed by:

a) Underperformance of Account-to-Account (A2A) payments

b) Low investment in Open Banking initiatives outside ‘The CMA Order’

c) Delayed procurement and launch of the New Payments Architecture (NPA)

d) High regulatory burden on Payment Service Providers (PSPs) to prevent fraud

e) Resilience challenges related to dominant card scheme coverage

We believe that the current system for processing instant payments between accounts is no longer fit for purpose. By contrast, the card payments infrastructure provides a proven model for consumers, merchants, regulators, and the payments industry alike. Its strengths lie in stable governance, a balanced risk-and-reward commercial model, efficient dispute resolution and consumer protection and a framework conducive to innovation and competition — all elements largely absent in A2A payments. Without these attributes, Open Banking and A2A will likely fail to realise their full potential, as they are beginning to elsewhere in the world.

This paper proposes an alternative structure for PSP-based payments in the UK. Our vision involves transitioning Pay.UK through two stages. Firstly, by upgrading the current Faster Payments infrastructure to a thin, ISO20022 native clearing and settlement layer, with competing schemes/providers providing innovative overlays. And secondly, once the upgrade to the Bank of England’s infrastructure is complete and we have a clear roadmap against a National Payments Vision, seeing Pay.UK evolve into playing a role similar to that of EMV Co., a standards-setting body that does not handle operational delivery or execution.

Competing schemes within the instant payments network would then adhere to Pay.UK-defined rules and commercially sustainable pricing, creating an ecosystem with motivated merchants, engaged consumers, and satisfied regulators, all adaptable to technological advances.

[1] Ministerial Foreword, National Payments Vision, November 2024

Our proposal offers a fresh approach to achieving robust, efficient payments for UK users, enhancing innovation, resilience, and consumer focus. While this paper reflects the perspectives of only some of the AB's members and not necessarily those of all of them, nor of all The Payments Association's members, we hope this paper stimulates dialogue on the future of UK payments infrastructure.

Transforming the UK's Payments Infrastructure

1. Background

What does "Transforming the UK's Payments Infrastructure" mean and why is it necessary?

Industries must continuously adapt to remain competitive and respond to new opportunities and challenges. When supported by strong governance, effective commercial incentives, and robust consumer protections, this evolution tends to progress steadily. However, when growth stagnates, more decisive and transformative actions are required. We believe the UK's payments infrastructure, particularly in supporting Account-to-Account (A2A) payments, has reached such a standstill. Only bold, transformational changes can break this deadlock and drive the necessary evolution forward.

This stems largely from the differing approaches between the established card payment ecosystem and the emerging domestic A2A ecosystem, which relies on the Faster Payments scheme and recent Open Banking initiatives. The result is a range of challenges that stifle consumer choice and investment, including:

- **Lack of a compelling use case:** A2A adoption demands coordinated efforts to build demand across merchants and consumers. Without a central approach to platform, commercial and trust-building elements and a low-friction customer experience, adoption remains slow
- **Lack of a commercial alternative to cards:** A2A lacks the margin needed to absorb risk and secure customers, unlike card payments. This gap limits A2A's competitiveness against cards
- **Excessive fraud and customer harm:** Without mechanisms to mitigate inherent risks, regulatory intervention must cover customer losses, impacting PSP revenues and driving up consumer prices. This constrains investment, innovation, and competition

Attempting to address these modern challenges with outdated approaches is ineffective; a fresh strategy is needed.

2. Lessons from around the world

A2A payments have achieved rapid growth in regions globally, with a projected global CAGR of 14% through 2027. In markets like Finland, Malaysia, the Netherlands, Nigeria, Norway, Poland, Sweden, and Thailand, A2A payments lead in e-commerce. Real-time A2A payments are also gaining ground in Brazil and India.

Successful schemes share commonalities: consistent central bank or government sponsorship, often bolstered by digital public infrastructure (e.g., digital identity systems), and limited card market penetration that provides a natural growth path for A2A.

Below is a table comparing selected A2A services:

Country	**Brazil**	**India**	**Poland**	**Netherlands**	**Sweden**
Name	**PIX**	**UPI**	**Blik**	**EPI / Ideal**	**Swish**
History	Central bank sponsored, launched November 2020	Central bank sponsored, launched 2016	Privately operated, owned by bank consortium and Mastercard, launched 2015	Launched in 2005 by bank consortium, bought by EPI consortium in October 2023	Launched in 2012 by consortium of 6 banks, along with a national digital ID in cooperation with Bankgirot and the Central Bank of Sweden
Segment	ecom + PoS, aim to replace cash and cards	ecom + PoS, aim to replace cash	ecom	ecom	ecom and POS
Distribution	Works with existing bank and digital wallets	Works with existing digital wallets e.g. Google Pay	Works with bank wallets	Works with bank wallets, EPI launched their Wero wallet	Works through smartphone app which connects mobile number with bank account
Value	Projected to account for 50% of ecom payment value by 2027	Wallets account for >50% of PoS and ecom value (UPI value included)	Accounted for 68% of ecom payment value in 2023, projected to reach 73% by 2027	iDeal accounted for 64% of Dutch ecom payment value in 2023. Wero is already available in Belgium, France and Germany with expansion to the rest of Europe ongoing	8M active users out of a total population of 10.2M

While global examples provide insight, the UK's unique market dynamics mean that replicating solutions without adapting them to reflect the challenges facing A2A in the UK would be ineffective.

3. Challenges facing A2A in the UK

Card payments have set a high standard

The UK has rapidly adopted card-based payments and innovations, like NFC and mobile wallets, with customers drawn to card protections such as chargebacks and the Consumer Credit Act's Section 75. Despite merchant concerns over fees, high acceptance, customer trust, and consistent investment have resulted in near-ubiquitous card usage across the UK. Launching a competitive A2A alternative without a solid commercial foundation and well-designed consumer protection remains challenging.

Faster Payments was not built for today's demand

Launched in 2008 as a bank-to-bank solution to replace the three-day ACH cycle, Faster Payments was not originally designed for the volume and variety of today's A2A demands. The hope that real-time A2A payments would flourish on this infrastructure was overly optimistic.

Open Banking is evolving in ways that were not envisaged

Open Banking in the UK is seeing early commercial development, with some Third-Party Providers (TPPs) creating unique, limited-scale commercial arrangements. However, without broader adoption, these ventures lack the momentum to thrive. Variable Recurring Payments (VRP and cVRP) may bring structure to Open Banking, but regulator-set pricing raises concerns about establishing a sustainable long-term model. The timing may also complicate adoption of any transformative new approach.

A third payment path is on its way: the Digital Pound

The UK is on the cusp of pursuing a “Digital Pound,” potentially offered as a central bank digital currency from the Bank of England or by commercial banks through the Regulatory Liability Network (RLN) initiative, led by UK Finance. This “third way” could divert market share from the nascent A2A sector, further complicating A2A’s development of a sustainable commercial model.

To move forward, we need to evaluate how these initiatives might coexist or impede each other. Timing is essential, as any new payment model requires years to achieve widespread customer adoption.

4. Comparing cards with A2A

It is instructive to compare card-based payments with A2A payments to identify how best practices from the card industry can inform transformative changes in A2A infrastructure.

The UK retail payments landscape is dominated by global card schemes across eCommerce and point-of-sale channels, while A2A payments are mostly limited to bank transfers and bill payments. Although Open Banking is unlocking new A2A use cases, the pace of adoption remains slow.

Meanwhile, there is growing demand for an alternative to card payments — driven by Open Banking’s success and the potential single point of failure in card models — suggesting that A2A payments could serve this need through enhancements to the domestic NPA and Payment Initiation Service Provider (PISP) capabilities. However, progress has been hampered by:

a) **Absence of a clear commercial model** driving A2A investment and innovation,

b) **Delays** in NPA implementation,

c) **Limited adoption** and development of Open Banking overlay services,

d) **Low merchant awareness and acceptance** of A2A benefits

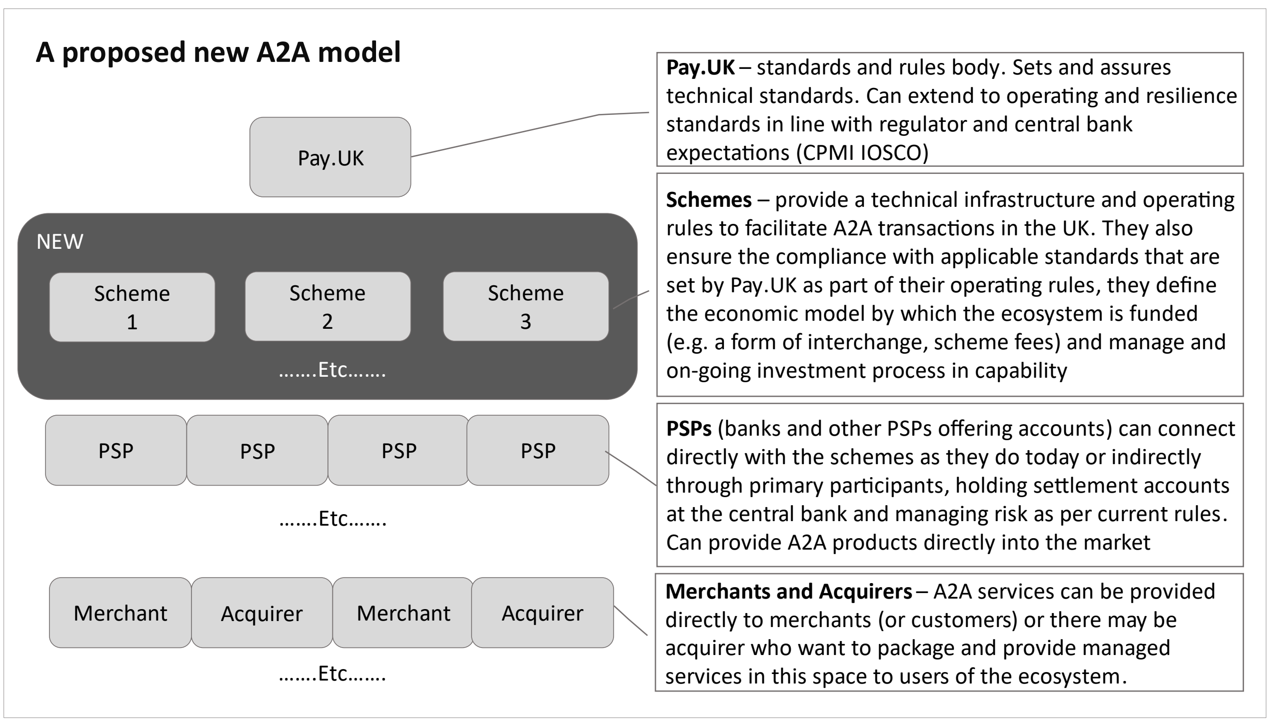
With the anticipated National Payments Vision (NPV) from HM Treasury expected by the end of 2024, we see an opportunity to reimagine A2A structures, aligning them with the successes of the card market in key areas such as customer protection, merchant assurance, and commercial viability. This paper aims to spark industry-wide debate, informing regulators, the Central Bank, Payment System Operators, and innovators on effective paths for A2A transformation.

5. A new approach for A2A

To achieve market consistency, universal acceptance, and consumer confidence for A2A, we propose developing the commercial foundation and capabilities necessary for it to rival card payments. This can be accomplished through the following steps:

1. **Transform Pay.UK into a domestic A2A scheme**. Develop the capabilities of Pay.UK to become a domestic scheme for A2A with a tight focus on setting rules and standards. Learning from recent market experience, those standards should cover technical message requirements, data, operational resilience, security and customer protection and merchant assurance, but it would not procure the infrastructure necessary to deliver A2A.
2. **Allow firms to bid to develop commercial schemes.** These would comply with Pay,UK's standards and provide clearing infrastructure, settlement connectivity and services directly to the PSP market. This would require a new paradigm of regulatory oversight, which may be akin to how the current card schemes are governed. We would expect those schemes to include the operating rules for their members and technical service providers to follow and ensure compliance. A standards- and rules-focused Pay.UK would define the multi-sided economic model and the regulators would monitor and enforce appropriate pricing and economics.
3. **Develop a functional market.** Allow the competitive schemes to develop a functional market for A2A services that meets user (merchant and consumer) needs through a sustainable commercial model. Pay.UK may act as a backstop when the market fails to meet a specific customer product need and may collaborate with agencies such as Open Banking in order to stimulate provision where required.

This new approach would enable A2A to deliver a resilient, sustainable alternative to card payments, capable of adapting to changing market demands and consumer expectations:



We believe that developing the A2A market on this basis meets a number of policy objectives:

- Underpins a consumer protection model
- Provides competitive and substitutable options through multiple providers
- Offers market participants a profit incentive to reward their investments
- Provides a focus for the central governing body that can major on standards and quality

It also enables the UK to realise the potential of Open Banking and capitalise on future innovations, thereby helping the Payments Systems Regulator to achieve its new 'second objective' of enabling innovation'.

6. A multi-sided market

Building a ubiquitous Open Banking ecosystem with the scale required to be economically viable means creating a multisided market by simultaneously driving demand from both consumers and merchants.

This demand arises on both sides of the market:

A: Consumer Demand

- Awareness (branding, mobile app)
- Relevance (merchant acceptance)
- Offering (capabilities, digital ID, commerce, rewards, social network)
- Experience (instant, frictionless)
- Trust & Security (fraud protection, buyer's protection)

Open Banking

PISP/ AISP

NPA

Rules & Standards

Technical Requirements

Trust & Safety

Scale

B: Merchant Demand

- Awareness (branding)
- Relevance (consumer demand)
- Offering (competitive pricing)
- Experience (payment timing)
- Trust & Security (fraud prevention)

A. Consumer demand:

One major challenge in promoting A2A and Open Banking in the UK is the lack of a prominent, consumer-friendly app. Terms like "Open Banking" or "A2A Payments" are not widely understood by consumers, unlike branded solutions like Swish, Venmo, and iDEAL, which provide a unified app supported by participating banks and PSPs. This familiarity fosters trust and adoption.

The UK's attempt with PayM was less successful because it was embedded within various banking apps, diluting its visibility and appeal. Designed mainly for peer-to-peer payments, PayM lacked point-of-sale functionality, preventing it from competing effectively with card payments. For A2A to gain traction, a recognisable brand must be visible on merchant sites, signalling acceptance and building consumer confidence.

Beyond basic A2A functionality, adoption can accelerate through additional services like digital ID integration or partnerships with social platforms (e.g. WhatsApp) for P2P/P2M transactions. An evolving app that includes commerce and rewards can further engage users and create new revenue streams for stakeholders.

Trust is crucial for any new payment method. To build this, fraud protection akin to the card chargeback system is essential. Moreover, consumers expect payments to be instant, seamless, and reliable. Recent FCA regulations allowing PSPs to delay payment clearance for up to four days in suspected fraud cases could disrupt the speed and predictability of A2A payments, potentially undermining trust and driving consumers back to card options.

B. Merchant demand/acceptance

Widespread merchant acceptance is critical for maintaining consumer relevance. To succeed, A2A payment acceptance should match that of card schemes. In multi-sided markets, initial incentives are often necessary to secure merchant adoption, especially in the UK, where shifting transactions from established schemes to Open Banking requires significant change.

Once a critical mass is achieved, merchants are likely to embrace alternatives to high card transaction fees, along with benefits like faster fund transfers. However, even with lower costs, the A2A commercial model must offer sufficient margins to cover operational expenses and fraud risks. The regulator should guide basic pricing, similar to interchange, while fostering competitive pricing among banks and merchant acquirers. Striking this balance will be challenging, especially during the scale-up phase.

For A2A to be viable, merchants need confidence in its security and fraud protection, comparable to what they experience with card schemes. Implementing digital identity solutions could enhance security, building greater trust in A2A transactions.

7. Concluding remarks

This proposal outlines a new market and operational structure for domestic A2A payments, addressing the need for a credible alternative to card payments. It aims to maintain parity, allowing the card market to thrive where it is most effective while positioning A2A to serve diverse use cases and market needs.

Implementing this model would foster ongoing innovation and development, supported by a sustainable commercial framework that encourages reinvestment and technological advancements. It would also create a credible commercial environment for engaging with emerging developments like cVRP and Digital Currencies.

The proposed structure introduces a competitive scheme layer, similar to card systems, which would enhance market dynamics and drive a more balanced, efficient ecosystem. By enabling A2A to compete effectively, this model would benefit consumers, merchants, and providers alike.

Moreover, this transformation aligns with the government's growth agenda, positioning the UK's payments infrastructure as a global leader, attracting investment, and generating employment opportunities.

For further information please contact Tony Craddock, Director General, The Payments Association.

APPENDIX

A detailed comparison between card and A2A payments

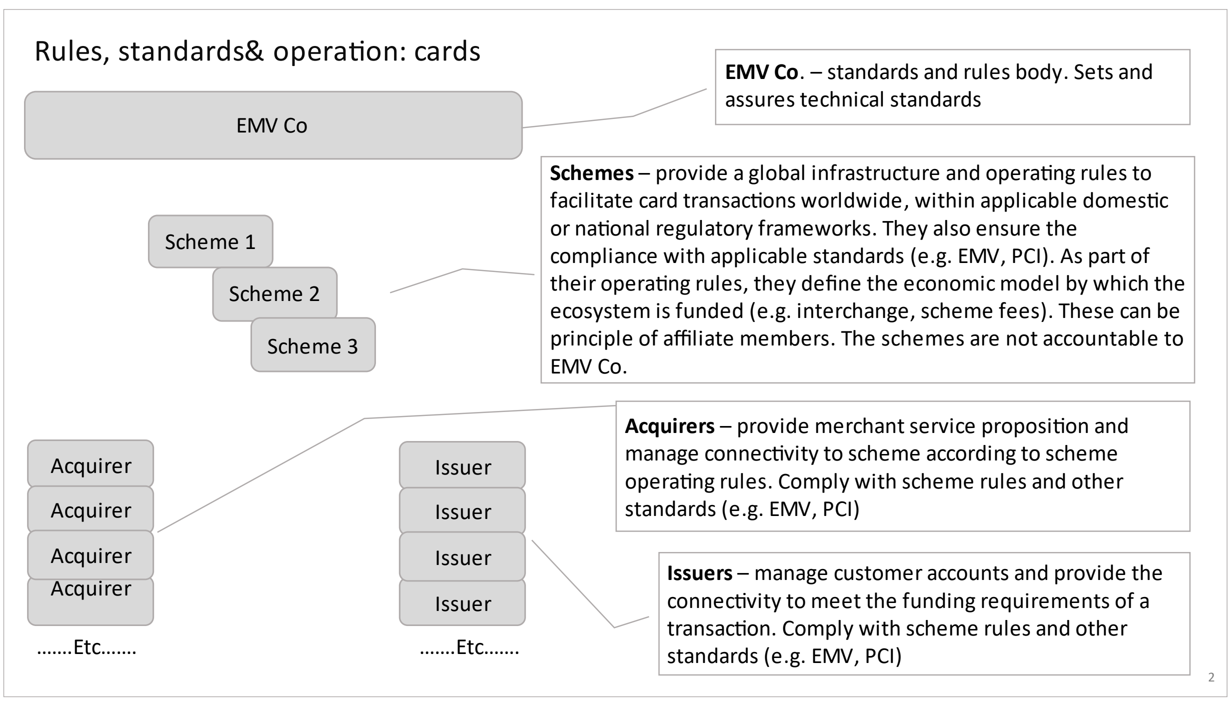
The rest of this paper sets out to compare and contrast the current arrangements in cards and A2A and, armed with insights from this, to explain why we came to the above conclusions.

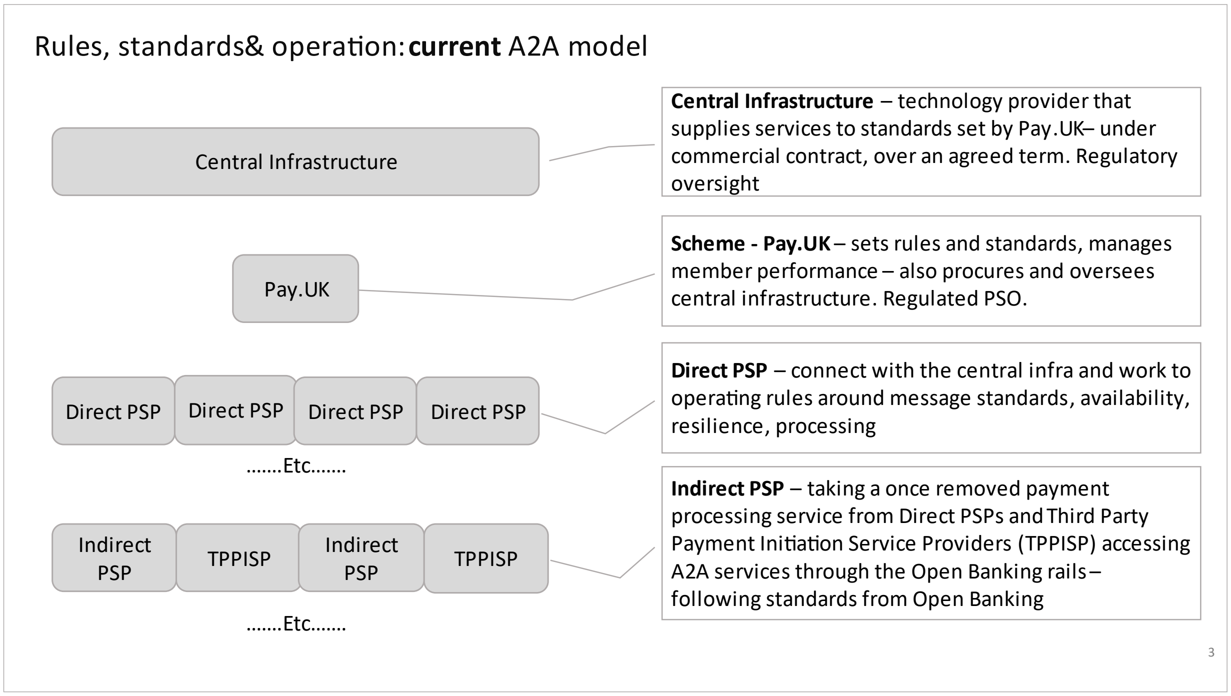
High level comparison	Cards	A2A
Customer protection and experience	International schemes provide a full dispute and exception management process and an agreed rule book. Chargeback process is universal and whilst UK credit card customers benefit from section 75 cover under the CCA most other cards are covered by a dispute and chargeback system that ensures consumers are protected. In addition, the merchant acquirers both levy a merchant service charge and hold fund reserves to cover potential chargebacks. Customers benefit from high levels of acceptance and technical capability – NFC, Chip & PIN, e-commerce, mail order, telephone order, digital wallets, wearables, etc., as well as the integration of value-added services (e.g. loyalty, BNPL, split payments, tipping, etc.).	No dispute or exception rule book – although guidelines generally agreed for credit error and bank error recovery. APP reimbursement rules also being implemented in 2024. Refunds required from merchants are left for the consumer to deal with directly. No chargeback process or section 75 as these are funded from the current account and not through a credit provision or interchange from the 4-party model. The nature of a Faster Payment is that it is irrevocable, and any recovery is on 'best endeavours' (Bacs Direct Debit payments do have a guarantee arrangement that supports recovery, but this takes three days and there is nothing comparable to the chargeback process that exists in cards in A2A payments). Banking apps provide rich levels of information and safe payment experiences. Currently no NFC capability, low levels of eCommerce acceptance and offerings.
Merchant assurance	Mature market of merchant acquirers providing full-service proposition. The 3-stage process (online authorisation, clearing and settlement) provides instantaneous and ubiquitous assurance of payment for the merchant. Multi-lateral commitments from ecosystem members (acquirers and issuers) to card scheme operating rules provide assurance around process and data. Card schemes' compliance enforcement on ecosystem players (e.g. acquirers, issuers, merchants, PSPs, technology providers) ensures ecosystem integrity.	A2A works bank to bank, with no service wrapper for merchants. They are Open Banking services with a wrapper that leverage the A2A rail through the Open Banking API infrastructure. The Faster Payment 2-hour service level can make PoS/eCommerce problematic – whilst most clear in seconds, it can be inconsistent. If cleared, merchants get real time value into their account.
Commercial model	Global schemes (e.g. Visa and Mastercard) adhere to a central technical rule book (from EMV Co.) and their own agreed operating rule books. They administer a 4-party model that involves interchange fees due to the issuer and other fees collected from the merchant which provide revenue streams to the scheme and the acquirer.	Retail consumer payments are free to consumers and to any merchants that accept them. There is no scheme or payment issuer revenue for PoS or eCommerce activity. Payment issuers (Payment Service Providers) pay the scheme on a per payment basis to cover scheme running costs. We should reflect on the interchange and scheme fee model when looking at the A2A set-

	This revenue provides funding to meet customer protection and long-term operating and investment needs, and a return on investment for the firms involved. It should be noted: 1. Interchange fee caps apply only to consumer transactions, and largely domestically since Brexit. 2. Caps don't apply to commercial cards, and these can be very expensive for merchants. 3. 3-party model schemes (e.g. Amex) are not included either, and these are very expensive for merchants. 4. As well as interchange (which goes to the issuer), merchants also pay "card scheme fees": e.g. Authorisation fee on each transaction, chargeback fee, retrieval fee, etc.	up. This should potentially also be considered for the A2A model. Any participation fees paid to the scheme would need to be augmented by other fees across the process.

Compare and contrast

The characteristics noted are deployed in an operating model across each part of the payments market as illustrated below:





What is apparent from the A2A model is that the rules are standards are also housed in a scheme that procures the central infrastructure and that choice and variety of provision is curtailed. This creates a tension – or a conflict – that is irresolvable.

Impact on delivery and experience

The nature of the two operating models has an impact on the delivery and experience for different payments users.

With the card model:

1. EMV Co. sets technical standards for smart cards and payment terminals and supports the market of multiple schemes that deliver to those rules (EMV = Europay, Mastercard and Visa).
2. The schemes provide further operating rules for technical requirements, commercial and pricing models[2] and enforce compliance with these rules on their members (acquirers and issuers). Schemes enforce compliance on service providers for applicable standards (e.g. PCI DSS). Acquirers ensure compliance for their merchants and are accountable to the schemes for this.
3. Competitive schemes, with an ability to develop margin and innovative income streams (interchange to issuer, card fees to scheme, acquirers with their own margin), allow for natural development through a self-sustaining ecosystem, and a marketplace for provision of services with funding for fighting fraud and other processes.

[2] The schemes also have dominion over who and how these ecosystem players can participate (e.g. PSPs, Payfacs, technology participants) which would be the rough equivalent of indirect participants and technology providers on the PSP rails.

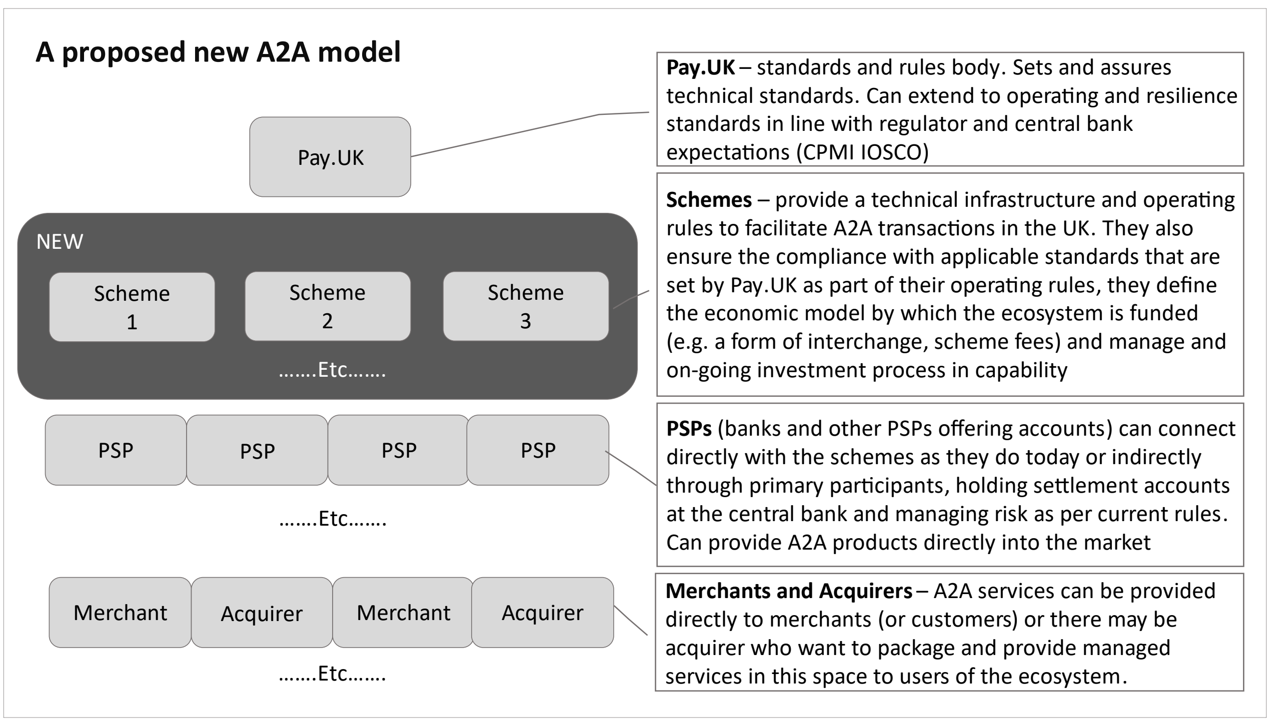
4. The marketplace is able to support provision for different market actors, participants and customers, whilst developing long-term strategic sustainability.

With the A2A model:

1. The scheme sets and governs the rules whilst also procuring and overseeing service provision, thereby managing the performance of all constituents of the market.
2. This leads to a singular approach and a natural monopoly, which provides limited commercial opportunities for development and tends to operate on a utility, 'all must move at the same time' basis.
3. This also constricts ongoing, real-time, iterative investment and innovation and leads to producing few but substantial 'milestone developments' that can take extended periods of time at a large expense.
4. Whilst perceived as independently governed, the scheme is reliant on agreeing a cost-plus pricing model with its direct participants (the 45 banks that are members of the Faster Payments Scheme). This can allow some margin development for key initiatives, but it does not provide a commercial underpinning for ongoing development and innovation, nor does its not-for-profit status provide for evolution in how the model operates because it is designed to reinforce the status quo.

A proposal for a new operating model for A2A payments

When comparing and contrasting the two approaches, we conclude that there are several aspects of the card operating model that can be deployed in the A2A operating model.



Other considerations

Person to Person (P2P) payments: The current A2A infrastructure provides the basis for a free to use P2P capability but, with the closure of PayM there is now no overlay service to provide a slick and simple exploitation of the underlying rails. Any move to a competitive scheme regime would need to consider the potential of competitive P2P services. These may be tiered from the free to use and unprotected services available today to new products that include support and an insurance option to provide enhanced consumer protection. The provision of P2P payments should be considered in light of the current market experience and anticipated significant costs involved in preventing APP fraud through the Payment Systems Regulator's (PSR's) new reimbursement model and rules.

Merchants' choice between cards and A2A: The competitive A2A market needs to not only create a commercial basis for its own existence and development, but it must also create a viable choice for merchants and customers. The price point will need to be at a level to drive ubiquitous acceptance and a competitive conversation rate. The offer will be a combination of cost, customer experience and utility.

Customer protection and fraud mitigation: Creating a commercial model to fund a full customer protection regime would allow the PSR's Authorised Push Payment (APP) reimbursement model to be retired over time. PSPs would soon be able to create a profitable revenue stream to ensure transactions are secure, convenient and nearly instant. This would allow parity with the card model in terms of operation and customer outcomes.

The fraud issues come to the fore when we look at cross-regulatory collaboration in A2A. This is catered for better in the card environment. For example, if a customer makes a card payment on a fraudulent website and the website disappears, post settlement, this will be dealt with by the chargeback process. If a customer makes an A2A payment that turns out to be fraudulent, this does not apply and the reimbursement models are not proportional or sustainable. One way of addressing this would be to collaborate with other regulators (e.g. Ofcom, CMA, ICO and others, perhaps through the Digital Regulatory Cooperation Forum). So if a website is fraudulent, it must be hosted somewhere, and the host should be accountable for fraud initiated from it. A large body of evidence suggests that a large proportion of APP frauds originate in social media marketplaces that do not have a recognised payment process. This has led the industry to lobby to bring the large technology and marketplace providers into the regulatory perimeter.

Open Banking: Open Banking in the UK currently leverages the Faster Payments scheme rails for PISP activity. Due to the current lack of a consistent commercial model in Open Banking, this access and use is essentially for free. However, TPPs consistently stress that a commercial approach is required in order to support a customer experience and ecosystem that can compete with cards and support the players involved. In other words, they need to be able to earn money from processing third party payments.

Some TPPs and next layer providers are already pursuing strategies that involve bilateral agreements that incorporate processing fees to support successful partnerships. Whilst it seems clear that there is a common objective to provide a solution that is competitive to the card offerings, there is no consistent model of explicit regulatory oversight.

If the proposed model of competitive A2A schemes became a reality, we need to consider how TPPs would exist in the proposed model illustrated earlier. In effect, they would be acquiring the payment as a merchant or as a service provider to the merchant. The Open Banking API access would still allow them to tap into PSPs for data and to make payments with the consent of the customer. However, the execution of those payments would then have to be processed through one of the competitive schemes, dependent on the PSP's arrangements. This would require a charge and, in a true commercial model, one would expect the PSP to be able to refer that in whole or part to the TPP.

In the current model, the PSP as a member of the Faster Payments scheme pays the processing per-transaction fee to the scheme (or an indirect member who pays their agent PSP) but has no means of sharing that cost. In a commercial model, this needs to be a multilateral arrangement and we need to consider how users, be they merchants and/or consumers, may be required to contribute funds to that model.

The underpinning commercial model for A2A services will, in effect, set a commercial requirement for the Open Banking ecosystem to create a level of consistency across providers and products. The services provided will need to meet scheme expectations around consumer protection and security and must meet the commercial hurdle to connect to the scheme capability. The current uncertainty around regulatory oversight and reach in setting (or not) the pricing for such products as Commercial Variable Recurring Payment (cVRP) is leading to a range of opinion and expectations from PSPs and users. These range from asking the PSR to take intervention action, to a clear pushback to allow market forces to prevail. The move to underpin Open Banking with a commercial A2A model will drive a necessary conclusion.

Wider commercial implications: The advent of a commercial model in the A2A rail will not only have an immediate knock-on effect to Open Banking, but it will also have wider implications. It will need to be reconciled against the current provision of commercial services directly to corporate and business customers by PSPs. These already attract servicing fees which the PSP will offset against the cost of internal infrastructure and schemes fees. The impact of the proposed model also then provides a further revenue opportunity for the PSP which can be used to further develop the competitive and attractive nature of the products. This again provides further innovation and competition that leads to the development of new products and propositions.

Future challenges: The A2A offering is developing and, as Open Banking grows in scale, we can expect demand to steadily, albeit slowly, increase. We can, however, also see other alternative transaction methods developing that will in time compete with it. For example, tokenised deposits that can underpin digital currencies and stablecoins is under development. This is in its infancy and the choice of technology – and appropriate regulations - to provide the 'smart' capabilities of programmable money is not yet clear, although we do expect the application of shared ledger functionality. If and how the A2A infrastructure co-exists to provide choice and an on/off ramp into the tokenised world is yet to be defined. What is becoming clear is that the use of API connectivity will be common. The adoption of a commercial imperative into an A2A payment scheme model would provide more flexibility for the competitive schemes to engage in innovation and collaboration, and this would build integrated and valuable experiences for customers and businesses that would compete against newer alternatives.

Delivery chain benefits

In order for the new operating model to succeed, there must be demonstrable benefits for each actor in the journey:

a) **Consumers**: trust, protection, improved experience, choice and added value benefits

b) **Merchants**: acceptance, conversion rates, real time clearing and liquidity and competitive offers from schemes

c) **Schemes**: commercial revenue, value, global opportunity

d) **PSPs**: commercial value, ongoing investment and innovation model, a balance of commercial viability and longevity between cards and A2A to ensure that customers are best served, and sustainability

e) **Regulators**: systemic resilience, consistent innovation, market competition and lower oversight requirements of PSPs

Key risks and dependencies

There is a primary risk to the success of this alternative approach that needs to be recognised and provisioned for. The proposal is based on the assumption that there will be firms willing to apply for the opportunity to operate a commercial scheme that provides A2A services. In order for the opportunity to be attractive, there are crucial requirements and support expectations that may need to be met:

- The firms seeking to provide services must be able to create value for themselves, as well as creating a value proposition for PSPs and users. This requires a positive regulatory environment that recognises the commercial realities of the market function and sustainability requirements. There will be a need to undertake detailed modelling and commercial negotiation between the parties that require the ecosystem, and the regulators that oversee it.
- There needs to be a sustainable liability regime between scheme providers, PSPs and service providers that protects both customers and scheme actors. The current mature developments in Faster Payments around net sender controls and in cards around the four-party liability models can provide examples for constituents in developing a safe, effective and value-creating ecosystem.
- In order to establish the market, there may need to be a level of mutual commitment and investment from government, the central bank, PSPs and new scheme providers to create a public – private partnership which can act as a collaboration contract to help establish a new paradigm and agree mutual success criteria and outcomes.