

8 March 2021

Kate Reader and Morag Bond
Co-General Managers, Digital Platforms Unit
Australian Competition and Consumer Commission
175 Pitt St
Sydney NSW 2000

Dear Ms Reader and Ms Bond

ACCC Digital Platform Services Inquiry 2020-2025 (Inquiry)

- 1 We welcome the opportunity to provide the Australian Competition and Consumer Commission (**ACCC**) with comments in response to the *Digital Platform Services Inquiry – March 2021 report on app marketplaces, Issues Paper, September 2020 (Issues Paper)*.
- 2 At Commonwealth Bank (**CBA**), our purpose is to improve the financial wellbeing of our customers and communities. Our objectives include contributing to the prosperity of all Australians and to the success of the broader economy; outcomes we believe consistently align with CBA's long-term success.
- 3 A key element of CBA's strategy is to deliver the best digital banking experience in Australia. We recognise that, increasingly, customers of digital financial services measure their experience not against the offerings of banks and other incumbent providers but based on the best digital experience available from any industry globally.
- 4 To keep pace with these expectations, we have committed to invest \$6 billion into technology over five years. Through these investments and series of related initiatives, CBA is delivering more personalised digital experiences and new products and services for our customers, underpinned by digital assets like the CommBank app and NetBank, and artificial intelligence and enhanced approaches to data analysis. Through our recently established X15ventures platform, we are also supporting the growth of start-ups and the development of further innovative solutions for consumers and businesses.
- 5 We believe the ACCC's Inquiry provides an important mechanism to consider the wide-ranging implications of the ever-expanding role of digital platforms in our daily lives and in the economy. As noted recently by Reserve Bank Governor Philip Lowe, big tech platforms are increasingly incorporating payments functionality into their service offerings, which, while providing new services and convenience, are raising new and complex competition and consumer protection issues.¹

¹ RBA Governor's speech, December 2020, Innovation and Regulation in the Australian Payments System. Accessible online at <www.rba.gov.au/speeches/2020/sp-gov-2020-12-07.html>.

- 6 In responding to the Issues Paper, our primary interest is in the policy and regulatory settings that will allow customers to maximise the benefit available from investments in digital innovation as they occur across the economy. While regulation should not impede innovation, it has a role to play in avoiding regulatory asymmetry and supporting competitive neutrality. Crucially, failure to maintain a competitive environment for providers of on-platform payment transactions will increase barriers to innovative investments, leading to less choice over time, while adding to inefficiency and cost across the economy. The right settings, by contrast, must be those that foster an environment where innovators large and small compete and succeed based on service offerings that are world-class.

Payment innovation and digital banking apps

- 7 Australia's retail payment landscape continues to change rapidly. The use of cash and cheque as a means for payment have declined significantly as electronic payment (including card-based payments) increase.²
- 8 Consumers have embraced digital wallets and contactless payments. In particular, consumers are increasingly relying on their mobile devices to effect payments:
- (a) Online payments and transactions are increasingly effected via mobile devices and apps (e.g., payments through mobility apps such as Uber, food delivery apps such as Hey You and Deliveroo), or stored payments (also referred to as card-on-file (**COF**) transactions where payment details are stored electronically on file and processed without re-entering card details).³
 - (b) Physical Point of Sale (**POS**) transactions are also increasingly effected through use of the Near-Field-Communication (**NFC**) technology within smart mobile phones. The NFC technology is the electronic 'hand shake' between the mobile phone device and a merchant terminal. It communicates stored payment details (e.g., credit card) directly from your phone by 'tapping' it against the terminal and, increasingly, through the use of wearable devices such as the Apple Watch.
- 9 Mobile devices and apps have become an important point of access for consumers to engage in commerce and transactions online – and this trend is expected to increase in the future. RBA data shows that in 2019:
- (a) Around **40%** of online payments were initiated via mobile apps.⁴ The RBA also expects that there has been an increased shift to online commerce in response to the COVID-19 pandemic, which may lead to a more permanent shift in purchasing patterns for consumers. Furthermore, around **45%** of survey participants used stored payment details (or COF) for an online payment.⁵
 - (b) The use of mobile devices (eg, mobile phones, watch, ring or other 'wearable') to make contactless payments has increased sharply. In 2016, only around 1% of all in-person card payments were accounted for by a mobile device (when the feature was relatively new), this figure has **grown significantly to 8% in 2019**.⁶ The RBA expects this has further increased since the survey was conducted in late 2019 due to the changes associated with COVID-19 by both consumers and merchants.

² Reserve Bank of Australia, *Payment Systems Board Annual Report 2020 – Trends in Payments, Clearing and Settlement Systems*, at p 21. Accessible online at <<https://www.rba.gov.au/publications/annual-reports/psb/2020/pdf/trends-in-payments-clearing-and-settlement-systems.pdf>>.

³ Reserve Bank of Australia, *Consumer Payment Behaviour in Australia: Evidence from the 2019 Consumer Payments Survey*, June 2020 (**RBA CPS 2020**) at pp 29-30.

⁴ RBA CPS 2020 at p 29.

⁵ RBA CPS 2020 at p 30.

⁶ RBA CPS 2020 at pp 23-24.

- (c) Consumer awareness of mobile-enabled payments is relatively high – **88%** of consumers are aware of mobile device ‘tap and go’ payments and **70%** are aware of in-app payments on a mobile phone.⁷ Alternative payment methods in contrast were neither widely recognised by consumers nor commonly used to make payments. For example, AliPay and WeChat Pay – which are popular digital wallet services in other countries – had only been used by **1.5%** of survey participants in the previous 12 months. Furthermore, most respondents had not heard of Beem It.
- 10 CBA’s experience is consistent with the RBA’s findings above and indeed since that time the trend to mobile transactions has continued to grow. Mobile devices and digital wallets have become an increasingly essential means by which CBA’s customers transact and this trend is expected to continue going forward.
- 11 Payment innovation today is increasingly focussed on app innovations on the mobile phone and how consumers can interface with merchants online and offline in a simple and streamlined way through a single device.⁸ Digital wallets located on mobile phones are an important part of these innovations. Significant overseas innovations include:
- (a) Alipay – an e-wallet app developed in China that allows users to save their debit or credit card details to the app and then use their mobile phones to make payments. The e-wallet is widely used in China for a range of transactions (in-store and online payments, and receiving and sending international money transfers). It also now allows visitors to China to start making mobile payments in the country when traditionally visitors to China have struggled to find a way to pay for goods and services online.⁹
- (b) Vipps – a mobile payment app in Norway that allows users to send/receive money and pay for goods at PoS, released in May 2015. The Vipps app also allows for scanning of bills and chat functionality.
- (c) WeChat Pay – a mobile payment platform developed in China that provides for a range of smart and efficient payment solutions. This includes allowing merchants to scan payment codes at PoS, allows users to scan merchant codes for payments, facilitates in-chat payment programs, pay within a merchant accounts, in-app payment and web payment solutions.¹⁰
- 12 Payment innovations such as these are valuable to economies. They increasingly seek to make transacting lower cost for consumers and businesses, more convenient, and give consumers access to a broad range of commerce (conversely giving merchants access to consumers). Competition and digital innovation also open up new avenues of product differentiation by seeking to meet a wide range of consumer demands. For example, allowing consumers to access a range of value-added services in addition to payments – including identity, loyalty, offers, and more.
- 13 As noted by the RBA, *‘payments system needs to support Australia’s digital economy. With the digital economy being an important key to Australia’s future economic prosperity, we need a payments system that is fit for purpose. We will only fully capitalise on the fantastic opportunities out there if we have a payments system that works for the digital economy’*.¹¹

⁷ RBA CPS 2020 at pp 35-36.

⁸ See RBA CPS 2020 at p 34, noting that innovative new payment products and services have emerged often facilitated by mobile technology.

⁹ See WorldRemit, *What is Alipay, and how does it work for sending money?*, 22 February 2020 accessible at <<https://www.worldremit.com/en/stories/story/2020/02/22/alipay>>.

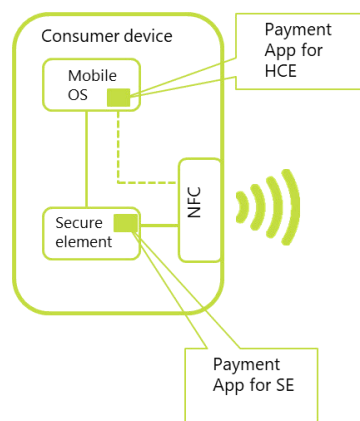
¹⁰ See WeChat website at <https://pay.weixin.qq.com/index.php/public/wechatpay_en>.

¹¹ Dr Philip Lowe, *A Payments System for the Digital Economy*, Speech, 10 December 2019. Accessible at <<https://www.rba.gov.au/speeches/2019/sp-gov-2019-12-10.html>>.

The importance of fair, reasonable and open access to mobile device ecosystems for digital payment innovation

- 14 The above trends evidence that mobile phones have become an important point of access and essential gateway for service providers to reach consumers to offer digital payment innovations. As noted above, consumers' mobile phones have become an increasingly important means by which consumers transact online and offline at the PoS.
- 15 The technology that gives consumers access to payment innovations within the mobile device ecosystem is the NFC technology together with the proliferation of apps on app marketplaces.
- 16 The NFC is the hardware technology that allows the mobile phone to communicate with contactless-enabled terminals. It exists within the mobile device. There are generally two approaches to accessing the NFC hardware. First, an Embedded Secure Element (**eSE**) can be used. The eSE is an approach whereby the payment credentials (i.e., secret cryptographic keys) are stored in a tamper resistant hardware module referred to as the eSE. The eSE has a direct connection with the NFC hardware.¹² Apple Pay adopted this approach.¹³ Second, a Host Card Emulation (**HCE**) approach can be used. HCE is a software approach enabling access to the NFC hardware so the mobile phone acts like a smart card, allowing it to be used for payment transactions.¹⁴ Android devices use the HCE approach.¹⁵

Figure 1. Mobile device ecosystems and the NFC¹⁶



- 17 The various mobile device ecosystems that exist today are well understood. The table below illustrates broadly the main ecosystem approaches, and the payment innovations and services that have become available on each. As is evident from the table below, there are significantly greater choices to customers available using the Android platform.

¹² See Consult Hyperion, *HCE and SIM Secure Element*, June 2014 accessible at <https://www.fintechfutures.com/files/2014/06/HCE_and_SIM_Secure_Element.pdf>.

¹³ See Apple, *How Apple Pay uses the Secure Element and NFC controller*, at <<https://support.apple.com/en-au/guide/security/seccb53a35f0/web#:~:text=As%20the%20gateway%20to%20the.NFC%20controller%20as%20contactless%20transactions>> accessed 4 March 2021.

¹⁴ See Consult Hyperion, *HCE and SIM Secure Element*, June 2014 accessible at <https://www.fintechfutures.com/files/2014/06/HCE_and_SIM_Secure_Element.pdf>.

¹⁵ See Android Developers Guides, *Host-based card emulation overview* at <<https://developer.android.com/guide/topics/connectivity/nfc/hce>> accessed 4 March 2021.

¹⁶ Extracted from Consult Hyperion, *HCE and SIM Secure Element*, June 2014 accessible at <https://www.fintechfutures.com/files/2014/06/HCE_and_SIM_Secure_Element.pdf>.

	Apple mobile device ecosystem permissions	Android mobile device ecosystem permissions
Device manufacturer	Apple	Samsung, Google, LG, HTC, Motorola, Huawei
Operating System	Apple iOS	Android
App Stores	Apple App Store	Google Play, Samsung Galaxy Store
NFC write access for PoS payments	Apple Pay only	Open
App Store in-app terms and conditions	Apple Pay only ¹⁷	Open
Digital payment innovations	Apple Pay	Google Pay, Samsung Pay, CommBank Tap & Pay, NAB Pay, Garmin Pay, Fitbit Pay, Alipay, Vipps

- 18 Publicly available data estimates that Apple’s share of mobile phones in Australia is around 54.5%¹⁸ as at January 2021, and a disproportionately high share of contactless payments are made by Apple customers. The remainder is split between a number of smaller suppliers. Accordingly, most Australians with a mobile device do not presently enjoy access to the innovations in digital payments or in-app payment method choice available on the Android platform. For consumers it is difficult to ‘switch’ ecosystems to access the array of digital payment innovations – due to the design of closed mobile device ecosystems, consumers become increasingly ‘sticky’ to their phone. Studies show that iPhone users are significantly more sticky than other mobile phone users.¹⁹ Moreover, given the vast majority of contactless payments are made on Apple devices, it is also not a commercially viable option for app developers and other innovators in the mobile phone supply chain to bypass Apple.
- 19 Mobile phone ecosystems and the approach to NFC hardware are deliberate design choices. It remains technically feasible to operate in an open or closed way – even for closed ecosystems. While security concerns have historically been raised as the reason for maintaining a lock on the NFC, there have been instances where Apple has modified their NFC capability and technology (ie, eSE) to remove switching barriers for customers to switch to Apple’s smartphones. In Japan, a largely cash-based society for POS payments, ‘Suica’ - a prefunded local contactless stored value card is used widely for Japanese public transport, vending machines, convenience stores, and other retailers. Suica relies on ‘FeliCa’, an early form of NFC technology. HCE can receive FeliCa-based transmissions therefore Suica can be loaded into Android-based digital wallets. In 2016, Apple manufactured special FeliCa embedded eSE in Japanese versions of iPhone and Apple watch thus modifying their NFC technology and capability to accept Suica payments. Apple has since extended FeliCa support in eSE to devices globally to enable international tourists to Japan to use Suica when visiting Japan.
- 20 As can be seen from the above the ability to unlock the NFC is important in order to offer innovative and competitive digital payment products. Suppliers need:
- (a) **Access on fair and reasonable terms to the NFC chip:** in Australia, the NFC capability on mobile phones has become the predominant means of transacting at the physical PoS with merchants. As noted above, Australians are familiar with, and trust, the use of the NFC payment capability, with around 88% of consumers aware of ‘tap and go’ payment methods.²⁰ In contrast, while there has been activity in other mobile phone

¹⁷ See Apple App Store policy at para 3.1.1: <https://developer.apple.com/app-store/review/guidelines/#business>.

¹⁸ <https://gs.statcounter.com/vendor-market-share/mobile/australia>

¹⁹ See CNet, *Almost all iPhone users will buy another iPhone, says survey – A study shows that Apple holds a 92 percent retention rates among iPhone users, compared to Samsung’s 77 percent*, 18 May 2017 accessible at <<https://www.cnet.com/news/apple-iphone-92-percent-retention-morgan-stanley-survey/>>.

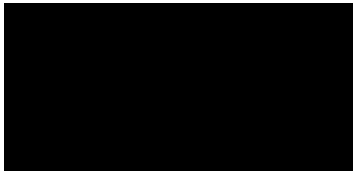
²⁰ RBA CPS 2020 at pp 35-36.

PoS payment methods (e.g., QR codes) these methods are more often than not a work-around to limitations on access to mobile phone NFC capability, and it remains to be seen whether these alternatives will prove to be a competitive alternative to 'tapping' at terminals as consumer adoption of alternative means of mobile payments may be difficult to change as consumers tend to be 'sticky' towards existing payment methods, such as the NFC.

- (b) **Access on fair and reasonable terms to offer in-app payments:** increasingly, mobile apps are becoming the means by which consumers transact commercially with businesses – whether it is ordering food delivery, paying bills, entertainment, retail shopping, or ordering a ride share. This trend is reflected in the proliferation of apps available to consumers.²¹ In-app payment on mobile phones has become an essential and critical means of facilitating this commerce. As noted by the RBA, around **40%** of online payments were initiated via mobile apps.²²

- 21 Given the importance of the mobile phone ecosystem to commerce and payments in Australia, it is vital to ensure that going forward such ecosystems operate on a basis of competitive neutrality that allows for, and facilitates, fair and open competition across the entire ecosystem. Closed ecosystems are more likely to frustrate innovation and stifle competitive market responses. Australians will suffer from mobile phone ecosystems that operate as bottlenecks or inhibitors of such competition while also raising costs throughout the ecosystem.
- 22 To preserve the opportunity for fair competition – it is important to ensure there is open, fair and reasonable access to the ecosystem, and that terms and conditions of use do not inhibit such competition. Ensuring competitive neutrality on mobile phone devices has been a focus of the global community, recognising the importance of markets in which mobile payment services are offered, being competitive and working for all consumers and businesses, rather than a few.²³

Yours sincerely



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²¹ See ACCC's Issues Paper at p 10: '1.79 million apps are currently available for download on the Apple App Store and an average of 770 new apps are published daily'.

²² RBA CPS 2020 at p 29.

²³ For example, in 2019 Germany introduced legislation to require fair and reasonable access to NFC chips on mobile phones by financial institutions. The European Union's draft Digital Markets Act (15 December 2020) also recommends similar reforms, recognising that mobile phone ecosystems that have become a gateway for service providers to access consumers via the mobile phone.