



**Parliamentary Joint Committee on Corporations and Financial Services -
Questions on notice relating to Mobile payment and digital wallet financial
services inquiry**

Apple Pty Limited

QoN001-01

A number of submissions to this inquiry raised concerns with Apple restricting direct access to the NFC chip in its mobile devices, potentially stifling innovation and increasing transaction costs for mobile payments (see for example submissions 1, 5, 6, 8, 11 and 16). These submissions argue that, this practice has triggered regulatory intervention and antitrust investigations in some international jurisdictions, including Germany, the Netherlands, the UK, and the EU. Whilst Apple's own submission points out that banking apps and digital wallet providers in Australia are able to initiate NFC payments on iOS devices, these transactions must still be routed through the Apple Wallet and the Apple Pay platform, thereby potentially incurring additional costs for merchants and card issuers. This practice is different from Google's approach with Android devices, on which third-parties have direct access to the NFC chip.

Would Apple assist the committee to understand Apple's position by providing:

- a. a response to the submissions noted above; and
- b. further information to that provided in Apple's submission on:
 - i. how Apple's NFC third-party access approach works;
 - ii. the reasons for using that approach;
 - iii. how Apple's approach enables innovation by digital wallet providers; and
 - iv. how Apple's approach affects the transaction costs for merchants.

Apple response: Contrary to some claims in some of the submissions, Apple provides banks with access to NFC functionality on Apple devices. Apple has developed a technical architecture that comprises hardware and software components and application programming interfaces (APIs) that banks can use to facilitate contactless payments with their cards and mobile banking applications. Apple chose to call this architecture Apple Pay because: (a) merchants need a simple way to communicate their acceptance of the service to consumers both in store and online, (b) Apple wished to facilitate consumer choice of payment method / bank by providing a consistent and simple experience, and (c) it allowed Apple to market the service to consumers without having to preference one bank over another.

The architecture is available to all banks in Australia on fair and non-discriminatory terms. All banks pay the same fees regardless of size and each bank is presented equally in the user experience. Consumers can easily switch between cards issued by different banks and it's very clear what card they are paying with at any time. The consumer is always in control of the default settings and which cards are enabled on their devices. Innovation is supported as third party apps can directly initiate contactless payments without having to pass sole control of the NFC architecture to a single bank app. Banks can also leverage Apple's APIs to make their iOS apps fully integrated with the payment experience and create differentiating experiences for their customers.

Apple chose a unique architecture to differentiate itself from Android by enabling consumers to easily switch between cards issued by different banks whilst still supporting contactless payments from third party apps and enabling non-payment uses of NFC technology (such as car keys and transit cards). Apple's pro-competitive technical architecture provides consumers and merchants with greater choice, supporting cards and use cases from thousands of providers.

Apple devices offer a hardware-based architecture where credentials are stored on a secure chip (Secure Element) on the device. The Secure Element provides a hardware layer to protect credentials from malware attacks and exploitation. This architecture has proven to be highly effective (for example at significantly reducing fraud in the payments market as well as reducing fraud costs for payment providers and merchants) and provides unparalleled security to consumers.

Host Card Emulation (HCE) is a less secure implementation, which was adopted by Android, Apple's largest competitor in mobile operating systems. Apple did not implement HCE because doing so would lead to less security on Apple devices. Google likely selected this implementation because Android software is used in a variety of hardware devices offered from many different companies other than Google, and therefore had to select a software-centric solution, even though it is a less secure than a secure element-based implementation. Apple, which offers a tight integration between the operating system and its own hardware, is able to offer a fully integrated solution that is superior to Android's approach.

A HCE implementation would also lead to a worse user-experience for consumers. Apple designed a technical architecture that third parties can use to offer a broad range of contactless solutions on Apple devices. For example, banks can use Apple technology to facilitate contactless payments for their customers.

The same architecture supports contactless transactions for other industries, such as car manufacturers, universities and transport operators, enabling consumers to use their iPhone or Apple Watch to unlock a car, access locations on campus or tap through a transit gate, and more. Apple's architecture enables Apple devices to seamlessly identify different terminal types (for ticketing, access control, transit, tollgates, payments and more) and present the user with the appropriate card.

The HCE approach requires consumers to pair the NFC functionality to a single app on their phone, which would undermine the simple user experience that Apple consumers expect when purchasing Apple devices.

If a consumer is looking for an experience where it can modify its mobile operating system with respect to NFC payments, Australian consumers have the choice of selecting an Android device, as millions of them have.

Apple designed a solution that provides consumers with a seamless experience that minimises friction when using the service while enabling easy switching between different payment solutions. Apple enhances customer choice by providing consumers with a user-friendly interface for adding and managing different cards, and choosing the appropriate card to present to a compatible terminal. Consumers can select or switch from a default card, and still choose a different card at a Point of Sale or terminal from any number of cards in their wallet.

It is exactly this ease of switching payment cards in Apple Pay that some banks would want to prevent by introducing more friction for consumers. They would prefer Apple changes its architecture to a solution that gives them control of the NFC functionality on Apple devices to make switching between different payment solutions more cumbersome. This undermines consumer choice and harms competition between banks — especially smaller banks and new entrants into the payments industry.

The scrutiny Apple has faced has largely been driven by complaints from companies that have sought to mischaracterise Apple's technical approach for their own commercial benefit. The Australian Competition and Consumer Commission (ACCC) has already conducted extensive investigations into mobile payments and concluded that requiring Apple to change its technical architecture to resemble that of Google would distort competition between iOS and Android, would reduce competition between banks and would result in distortions in the technology market.¹ In the Netherlands, the Authority for Consumers and Markets (ACM) recently announced a decision to close its investigation into payment apps' access to NFC technology having concluded that Apple's approach did not breach EU regulations. More importantly, the Reserve Bank of Australia carried out a comprehensive Review of Retail Payments Regulation in Australia and rightly did not see a case for regulatory intervention in Australia. Some of the regulatory interventions in Europe cited by the Committee are, in our view, misguided and seek to place disproportionate burdens on companies. Apple strongly believes that regulations that prescribe a business / commercial model or dictate a company's technical approach to hardware and software, ultimately put consumers at risk and stifle competition and innovation. Apple continues to engage with other authorities and regulators to demonstrate that Apple in fact provides fair and non-discriminatory access to NFC, and that Apple's approach (which is different to Google and other HCE providers), enhances competition while protecting consumers' privacy and security.

Finally, it is not correct that transactions are routed via Apple Wallet and the Apple Pay Platform to incur additional costs for merchants and issuers. Apple does not offer or issue any of the credit, debit or prepaid cards used by consumers when making payments using Apple technology. Apple does not offer or operate payment accounts and is not involved in the processing, authorisation or settlement of transactions. Consumers use their existing credit, debit or prepaid card accounts and card scheme rails to transact with merchants as agreed with their bank.

¹ See <https://www.accc.gov.au/system/files/public-registers/documents/D17%2B40724.pdf>

Apple does not charge consumers or merchants for using or accepting Apple Pay. In fact, all Apple Pay transactions are card transactions and merchants do not incur any additional fees for accepting Apple Pay.

Apple, as a technology provider, has a commercial model for Apple Pay with the banks that use its technology, and aims to operate a viable business model like any other company in the industry². Apple's commercial model is different to other solutions on the market which are based on advertising and monetisation of data. Apple charges a small and transparent fee to the banks for their use of the Apple Pay technology and does not sell data. All banks, large and small, pay the same fee.

Some of the submissions referred to by the Committee in this Question QoN001-01 are based purely on speculation and misstatements, and come from partisan parties that are not privy to Apple's contractual arrangements, and result in conclusions that are just not credible. The argument that Apple's approach stifles innovation is contradicted by the fact that there are no examples of successful bank apps on Android despite having so-called 'direct' NFC access on Android. Some banks have actually withdrawn their NFC wallets on Android.³

Apple does not agree with the suggestion that it should abandon its privacy focussed approach and copy a model from its competitors that is ultimately less secure and erodes privacy for Australian consumers. Not only would this go against the spirit of competition and innovation that Australia aims to foster, it would also deprive the market of an option that represents the Australian values of privacy and security.

Similarly, Apple does not find the submission from the Australian Retailers Association (ARA) that Apple's approach restricts innovation, to be credible. Apple does not prevent developers and retailers from using NFC, nor does Apple restrict developers and consumers from using non-NFC payment solutions on Apple devices. In fact, the user experience cited by the ARA has been available in Australia since October 2017 with Woolworths Rewards, which enables consumers use their loyalty card with NFC on Apple devices. In addition to NFC, merchants can also accept Barcode and QR Code functionality as well as plastic cards.

² There are numerous companies that provide services to banks, for example IDEMIA, Placard, G&D and AB Note that charge fees for their services

³ <https://www.westpac.com.au/faq/tap-and-pay-removed/> ³ <https://www.channelnews.com.au/anz-mobile-pay-will-shut-down-next-month/>