



Response to the Reserve Bank of Australia on the Australian Debit Card Market: Default Settings and Tokenisation

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Group Country Manager Letter

19 July 2023

Ellis Connolly
Head of Payments Policy
Reserve Bank of Australia
GPO Box 3947
Sydney NSW 2001

Via email: pysubmissions@rba.gov.au

Dear Ellis,

Visa's submission to the Reserve Bank of Australia on the Australian Debit Card Market: Default Settings and Tokenisation

Visa welcomes the opportunity to share our perspectives on the Reserve Bank of Australia's (RBA) Australian Debit Card Market: Default Settings and Tokenisation Issues Paper (the issues paper).

We support the RBA's commitment to ensuring that the payments ecosystem remains efficient, reliable and secure.¹ And in responding to the issues paper, Visa's submission focuses on several topics, including the challenges raised by the RBA's proposal on default settings, which impacts card issuance, and best practices for the tokenisation of Dual Network Debit Cards (DNDCs) for online payments.

In addition, we provide our perspectives on a number of specific questions in the issues paper, such as if existing merchant terminals will be able to accept transactions conducted using a DNDC without a set default routing network.

Visa is available to provide further details on our submission if helpful.

Yours sincerely,



Julian Potter
Group Country Manager, Australia, New Zealand and South Pacific

¹ Reserve Bank of Australia website, [Strategic Priorities for Payments Policy | RBA](#).

Executive Summary

The following key points are addressed in Visa's submission to the Reserve Bank of Australia (RBA) regarding the Issues Paper (the issues paper) on "The Australian Debit Card Market: Default Settings and Tokenisation":

Default Settings

Recently published data from the RBA suggests that **the industry is making good progress with regard to LCR *availability*** (i.e., acquiring banks offering LCR to their merchant customers as an option). The Bank has stated that LCR is available to be turned on for 90 per cent of providers' merchants. "Where there are gaps in availability, this is mainly due to providers needing to upgrade old terminals," the RBA has said².

- In light of this progress, and taking account of the factors outlined below, **Visa encourages the RBA to allow the market to continue advancing the uptake of LCR *availability*, and not proceed with a policy to prohibit a 'priority network' at the point of issuance.**

- **The key factors behind Visa's view are:**
 - **The time and cost to make the changes the RBA proposes at the time of card issuance could take several years and be substantial** because: (i) the card personalisation, testing and certification processes (software and tools) will need to be modified; and (ii) Dual Network Debit Cards (DNDCs) are typically issued with at least a three-year minimum validity period and scheme applications and their relevant parameters cannot be changed once the cards have been personalised.

 - **There is no exhaustive way to ensure that the RBA's proposed modifications will be compatible with terminals at the PoS in overseas jurisdictions.** This may have a significant negative impact for Australians travelling overseas, with an estimated 13.4 million Australian residents travelling offshore annually by 2027.³

- In addition, Visa wishes to bring concerns about the **possible unintended consequences** of the Bank's proposal to its attention:
 - **The RBA's drive for enablement of LCR may lead to less merchant choice (MCR). Given that acquirers have made LCR almost universally available in the market today, we strongly encourage RBA not to *require acquirers to enable LCR* – unless**

² Reserve Bank of Australia (2023), [The Shift to Electronic Payments – Some Policy Issues | Speeches | RBA](#)

³ Tourism Research Australia (2022), "Tourism Forecasts for Australia: 2022 to 2027", [Tourism-Forecasts-for-Australia-2022-to-2027.pdf](#), p14.

individual merchants specifically request *enablement*. Requiring LCR enablement (as distinct from Merchant Choice Routing, or MCR) presumes that option is best for every merchant and does not take into account the variety of factors, including security and innovation, that merchants consider when deciding what payment options best suit their business needs.

- **The lack of consultation on mobile wallet provider solutions may lead to erosion of consumer choice and have other unintended consequences.** While Visa appreciated that the Review of Retail Payments Regulation enabled public and industry-wide engagement, the RBA's approach of engaging directly with mobile wallet providers following the review did not include an open consultation process on this matter. As a result, Visa and other industry participants were not given the opportunity to share perspectives on, among other things, the operational and consumer choice implications of the Payments System Board's (PSB) announcement⁴ for the broader payments industry.

Tokenisation

- Visa commends the RBA for its focus on tokenisation and agrees with the Bank's assessment of the **broad benefits that tokenisation can provide to consumers, merchants and the ecosystem.**
- Visa also commends the **RBA for its focus on moving from PAN retention to achieve "the full security benefits of tokenisation"**⁵. We agree with the Bank's view that "a key dependency as to when this can occur is the timing of the launch of eftpos' eCommerce tokenisation service"⁶.
- **We support (and regard as achievable) the timeline of the end of 2024** for enabling our clients and partners to implement the RBA's expectations.
- **Visa agrees with the proposed RBA expectations** outlined in 'Box C' of the issues paper.⁷ We encourage the Bank to take a flexible, principles-based approach to the fulfilment of the proposed expectations in lieu of setting forth prescriptive implementation details.
- **We support industry participants, based on their role in the ecosystem, adopting or supporting token portability, synchronisation and visibility** – all of which underpin a robust and competitive ecosystem that supports future innovation.

⁴ Reserve Bank of Australia (2022), [Payments System Board Update: November 2022 Meeting | Media Releases | RBA](#)

⁵ Reserve Bank of Australia (2023), [The Australian Debit Card Market: Default Settings and Tokenisation \(rba.gov.au\)](#), p9.

⁶ Ibid.

⁷ Ibid., p10.

- Visa recommends that **all industry participants, specifically issuers and merchants, consistently implement card lifecycle management processes** as offered by their preferred scheme(s).

Response to Consultation Questions

Setting a default network on DNDCs

Visa welcomes the RBA's interest in receiving stakeholder inputs on the interplay between contactless transactions and Merchant Cost Routing (MCR) (often used interchangeably with Least Cost Routing or LCR). Importantly, however, we note that LCR has been introduced in a manner where acquirers are being strongly encouraged by the RBA to achieve merchant enablement, whereas MCR focuses on merchants having free choice to route payments if they wish).

Visa has had the privilege of serving Australian consumers and merchants for several decades. Together with our Australian financial institution, fintech and business clients, merchants and our technology partners, Visa is committed to building a future of commerce that fosters Australian economic growth, security and innovation. We continue to enable new payment flows and expand digital payment acceptance across the payments ecosystem, ensuring that every Australian can both pay and be paid in a secure and convenient way. We are realising this through Visa Fintech Partner Connect and the Visa Accelerator Program, with the latter providing Australian fintechs access to Visa's technologies and networks. Regarding security, in 2021, Visa's AI-driven security helped financial institutions prevent more than AU\$354 million in fraud from impacting Australian businesses.⁸

As the RBA has stated, contactless card payments are used near universally by Australian consumers. This points to contactless payments providing a number of specific benefits to consumers, merchants and the economy at large, including:

- **Secure transactions:** Tapping a physical card, a payment-enabled mobile or wearable device is a secure way to pay because each transaction includes a unique signature, just like contact EMV⁹, and protects against card skimming fraud.
- **A better experience at the Point of Sale (PoS):** The hygiene and speed of checkout and the benefits of tapping at the PoS extend to both merchants and their customers.
- **Operational efficiency:** Contactless payments reduce wait times, improve throughput and reduce the risks inherent in merchants handling cash.

⁸ Visa (2021), "[Visa's AI prevents more than \\$350 million in fraud from disrupting Australian businesses](#)".

⁹ In a contact EMV transaction, the card is inserted into the PoS terminal so that the chip on the card is in physical contact with the reader in the PoS terminal. The chip and the PoS reader then exchange the information required to initiate a payment using the EMVCo specifications.

In addition, when contactless payments are made on a Visa card or credential, they come with further layers of assurance, including Visa's Zero Liability Policy for consumers to protect them from fraud losses and unauthorised transactions, as well as a payment guarantee for merchants.

Consultation Question

1. What would be the technical or practical challenges raised by prohibiting the setting of a default routing network on DNDCs at issuance? Could these challenges be overcome?
 - a. By when would it be feasible for payment service providers to have identified and implemented a routing network preference for all of their merchant customers (such as by moving them to an LCR plan)?
 - b. Will existing merchant terminals be able to accept transactions conducted using a DNDC without a set default routing network, assuming that payment service providers have implemented a routing network preference for all of their merchant customers?

Visa Response

In the RBA's issues paper, the Bank expresses some concern that card present, contactless transactions made with Dual Network Debit Cards (DNDCs) have 'default routing' to international payment networks as a result of these networks being "set as the first-priority network"¹⁰. Specifically, the RBA expresses concern that this results in "upward pressure on debit card payment costs" and reduces competition between debit schemes since consumers or merchants are generally unable to choose their preferred network for contactless transactions.¹¹ The Bank believes that these concerns can be addressed through LCR, but that there have been delays in implementation and merchant take-up. Therefore, the RBA is considering a policy proposal whereby it would prohibit the ability of issuers to set what it refers to as a 'priority network' at the point of issuance.¹² Below, we explore each of these concepts in detail.

A DNDC allows a domestic payment in Australia to be processed either via the international payment network or eftpos at the PoS. Currently in Australia, from a technological and operational perspective, an issuer places an Application Priority Indicator (API), or what the RBA refers to as a 'priority network', on the card at the time of issuance. The API plays a critical role in the dialogue that occurs between a payment card and a terminal at the PoS in order for the transaction to be processed seamlessly. This is true not only in Australia, but also when Australians use their cards internationally.

Through the introduction of LCR in Australia, a merchant has the option through the terminal configuration to disregard or "override" the 'priority network' at the PoS and choose *any network*

¹⁰ Reserve Bank of Australia (2023), [The Australian Debit Card Market: Default Settings and Tokenisation Issues Paper](#), p5.

¹¹Ibid., p1.

¹² Ibid., pp5-6.

supported by the consumer's payment card. In practice, this means that if a consumer presents a payment card that can be processed by both the Visa and eftpos network application, the merchant can choose which network through which they want the transaction to be processed. This terminal configuration and software are not globally ubiquitous, which means the way an Australian merchant terminal processes a DNDC product in Australia is unlikely to be the same as the way a merchant terminal internationally processes it.

In Australia there are currently three different payment presentment methods for DNDCs for card present transactions at the PoS, each of which interplay with the option of LCR at the PoS:

- (1) **CHIP/PIN:** A DNDC cardholder physically inserts their card in the PoS terminal, and the cardholder can choose which network processes the transaction by either pressing the 'CHQ'/'SAV' button (eftpos) or the 'CR' button (for international payment networks).
- (2) **Contactless payment with a physical card:** A cardholder 'taps' a physical card at the PoS and the terminal reads the chip in the DNDC via near field communication technology (NFC). Currently, these transactions can be routed to either international payment networks or to eftpos if the merchant has enabled LCR functionality on their PoS terminal.
- (3) **Contactless payment with a mobile wallet or the "pays" (e.g., Apple, Google, Samsung):** A cardholder presents or 'taps' their mobile wallet on a mobile device that is equipped with relevant NFC technology. In certain mobile wallets, the cardholder can specify the priority network on their phone before the 'tap' and choose their preferred payment network.¹³

It appears that to mitigate the perceived risk of merchants not being able to offer LCR in situation 2 above, the RBA is considering introducing a policy to prohibit issuers from setting a priority network on DNDCs. At the same time in relation to situation 3, the RBA has announced having agreed with some mobile wallet providers to either eliminate or override consumer choice for mobile wallet-based transactions.

For several years, LCR has been a key focus for the RBA. In March 2023, the RBA published for the first time, data about major acquirers in Australia and whether they have made LCR **available** to merchants for card present DNDC transactions.¹⁴ In Visa's view, the data was overwhelmingly positive for merchants. Specifically, the RBA surveyed nine acquirers in Australia, with six acquirers having made LCR **100 percent** available to merchants and an additional acquirer achieving **98 percent** availability for merchants.¹⁵ The RBA concludes that as of March 2023:

Providers have generally made good progress, with LCR available to be turned on for 90 percent of their merchants. Where there are gaps in availability, this is mainly due to providers needing to upgrade old terminals.

¹³ Ibid., pp3-4.

¹⁴ Reserve Bank of Australia (2023), [The Shift to Electronic Payments - Some Policy Issues | Speeches | RBA](#).

¹⁵ Ibid. The remaining two acquirers have achieved 89 percent and 55 percent LCR availability for merchants.

*These providers **have assured us that this will be completed over the next year** [emphasis added].¹⁶*

In addition, the Bank notes that, with respect to contactless payments using mobile wallets, it will be **feasible** to introduce LCR for mobile wallet transactions by the end of 2024 and that the industry is already working towards meeting this timeline.¹⁷

Visa, thus, encourages the RBA to allow industry and the ecosystem at large to continue their efforts to achieve full availability of LCR, while also permitting merchants to freely decide if they wish to enable it. We also do not believe that it is advisable to consider any policy proposals that we anticipate would create product acceptance issues internationally. In fact, any policies to potentially supplant current market dynamics that are already yielding positive progress for LCR will likely result in significant disruptions in the ecosystem and require considerable time and resources. For example:

- (1) **Time and cost:** The RBA reported in 2019 that around 90 per cent of debit cards in Australia are DNDCs.¹⁸ Issuers set up multi-network applications for these DNDCs and their respective priority indicators at the time of issuance according to EMVCo technical, operational and international standards to ensure interoperability when presented to a merchant at the PoS. Therefore, the time and cost to make these changes at the time of card issuance could take several years and be substantial because: (i) the card personalisation, testing and certification processes (software and tools) will need to be modified; and (ii) DNDCs are typically issued with at least a three-year minimum validity period and the priority indicators are part of the initial card personalisation process at the time of issuance. In instances where issuers have begun extending the validity period on DNDCs due to global supply chain challenges, chip shortages and the cost of re-issuing physical cards, the time and cost issue would be higher.

As such, issuers will have to bear significant costs to change the technology at the point of issuance, as well as en masse reissue DNDCs already in circulation. These costs include, but are not limited to, operational costs, assisted channel capacity for activation, additional customer support and cardholder impact for recurring and card-on-file e-commerce transactions.

In addition, if the RBA were to introduce this proposal and issuers are unable to make these significant investments in a timely manner, there will be DNDCs in Australia with differing technological configurations, which may lead to disruption and friction at the PoS, and confusion and uncertainty in the ecosystem at large.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Reserve Bank of Australia (2019), [Review of Retail Payments Regulation: Issues Paper \(rba.gov.au\)](https://www.rba.gov.au/retail-payments-regulation-issues-paper), p14.

- (2) **Technological Impediments:** As an initial point, the RBA’s proposed policy of transferring “choice” from the PoS to the point of issuance will result in slowing down the uptake of LCR rather than the Bank’s intended objective of accelerating uptake. If issuers have to proceed with modifying all of the technological, operational and international standards when they issue cards, then all terminals in Australia at present will need software updates, or - in a worst-case scenario - a full hardware change in order for transactions to continue to be accepted and processed with newly-configured DNDCs. Given that the RBA has already noted that where there are gaps in the current LCR rollout “this is mainly due to providers needing to upgrade old terminals”¹⁹, the clear expectation should be that the need to alter all terminals to achieve the proposal the RBA has put forward would be even more challenging.

For example, as detailed above, issuers set an API when the DNDC is issued. If issuers must now issue DNDCs without an API then when the physical card is presented at the PoS, the terminal will not be able to create a candidate list to identify the network on which the transaction will be processed. It is unlikely an ‘unintelligent’ or dated terminal will be able to choose a network. If the terminal cannot detect which network the transaction should be processed on it will likely lead to declines, consumer frustration and lost sales for merchants.

- (3) **Negative impacts on interoperability:** Interoperability through standardisation has been the main driving force towards maturity of the Australian payments landscape, where the nation is one of the top markets globally on usage of electronic payments. Visa, together with our local and international clients, has played a key role in bringing Australia to this current state by continuously evolving the network capabilities, payments ecosystem standards, acceptance methods and the cardholder/merchant experience.

Interoperability, innovation, and scale are only possible if all parts of the payments ecosystem design and build on a common framework and standards. For the most part, Visa and our clients in Australia rely on EMVCo standards, a set of technical requirements designed by EMVCo to overcome any inconsistency and fragmentation across payment channels and regions.²⁰ For example, all DNDCs in the Australian market are issued under EMVCo standards. Leading Australian banks, issuers, merchants, technology providers and eftpos (among others) have signed up as EMVCo participants to promote security, innovation, and flexibility in the payments ecosystem.

Payment cards are the preferred way for consumers to pay merchants overseas, both in person and online. The RBA’s proposal of significantly altering the technological, operational and international standards for DNDCs will have a detrimental impact upon Australian residents who travel abroad. We note that from a technological perspective, when a card is presented at the PoS two computing technologies come together in any

¹⁹ Reserve Bank of Australia (2023), [The Shift to Electronic Payments – Some Policy Issues | Speeches | RBA](#).

²⁰ EMVCo (2023), [What are EMV Specifications?](#)

card transaction: (1) the chip on the physical card and (2) the terminal at the PoS. Both technologies have distinct characteristics in terms of mobility – the physical card ‘travels’ with the cardholder, while the terminal ‘stays within Australia.’

All Australian-issued Visa DNDCs are programmed to function domestically, while also allowing Australian cardholders to use these cards overseas. Therefore, any technological standards embedded into the payment card for use within Australia are also ‘backwards tested’ to ensure that it is interoperable at a global level. This is done to ensure that Australian consumers can consistently and seamlessly use Visa DNDCs elsewhere. However, if current technological, operational and international standards are modified to satisfy a specific requirement unique to Australia, there is no exhaustive way to ensure that those modifications will be compatible with terminals at the PoS in overseas jurisdictions. Even if domestic terminals are updated as part of this initiative, there is no guarantee that Australian-issued DNDCs that are personalised outside the EMVCo standards (i.e., without an API) will properly function when presented at terminals overseas.

In light of the recent data published by the RBA that LCR is widely available in the ecosystem, and all of the technological and operational obstacles outlined above, **we encourage the RBA to allow the market to continue making progress with the uptake of LCR (including by permitting merchants to freely decide if they wish to enable it), and not proceed with a policy to prohibit a ‘priority network’ at the point of issuance.** In addition, Visa assesses that at this time it would not be feasible from a technological, operational and financial perspective for the industry, not to mention the potential impact on merchants and the public as outlined above. These challenges will result in uncertainty and confusion in the market, which is the opposite of the RBA’s intended objective of further catalysing LCR in Australia. Given the advice provided above, Visa queries if it is in the ‘public interest’ for the RBA to continue exploring this policy when – particularly given the timelines – it will achieve its goals more quickly via the ongoing implementation of LCR rather than through the policy proposal outlined in the issues paper.

Consultation Question

2. What would be the benefits of such a prohibition? What would be the costs? Please provide estimates of the costs that would likely be incurred by your institution.

Visa Response

Given the details Visa outlines above, including regarding the need to re-issue cards and reprogram terminals, we do not anticipate any benefits at this time from the RBA’s proposed policy. In fact, we assess that it will create uncertainty and confusion in the market, require extensive time and resources to implement (if even feasible), result in a backward step on the

progress of LCR uptake already underway, and negatively impact Australian cardholders when they seek to use their DNDCs while overseas.

In addition to the costs to issuers outlined in response to Question 1, for Visa, while we are not yet able to provide a detailed cost assessment, if this change were to come into effect, we would need to review our card and terminal certification assets. This would have broad impact across our human resources, technology and processes.

Visa has a consistent set of white plastic testing processes and technology in place, which includes verifying issuers' physical cards before they go into production. Verifying that personalisation of the chip is in line with EMVCo rules is a fundamental principle during that process. In our current set-up across the region, it is not possible to certify multi-network cards without an API.

On the acceptance side, Visa offers a set of acceptance device testing toolkits for acquirers, merchants and PoS vendors to self-certify their acceptance terminals. If the RBA's proposed change were to proceed, exceptions and customisations will be required to those testing assets and processes. In addition, we will face downstream impact arising due to Australian market operating standards, processes and technologies diverging to a different model than that used in all other jurisdictions.

Consultation Question

3. What alternative courses of action could better address the Bank's concerns around default settings on DNDCs to improve efficiency and competition in the debit card market?

Visa Response

Given the challenges and expected timelines outlined above regarding the implementation of the RBA's proposal and the progress made to date with LCR, Visa encourages the Bank to continue pursuing its current approach on LCR – including for the market to offer merchant choice - rather than invoke significant change and risk to the card-issuing side of the ecosystem. Given that the RBA has publicly stated that “[m]erchant groups have consistently highlighted that LCR is not easily accessible for merchants in practice”²¹, the Bank may wish to work more closely with acquirers on how to increase accessibility if a merchant decides to proceed with routing enablement.

Merchants willing to exercise choice have the option to do so already on physical cards today. In addition, they will be able to do so on digital wallet transactions, given that the RBA has found delivery of LCR functionality for mobile wallet transactions by 2024 to be feasible following its discussion with industry participants.²² Going forward, we encourage the RBA to continue

²¹ Reserve Bank of Australia (2023), [The Shift to Electronic Payments – Some Policy Issues | Speeches | RBA](#).

²² Ibid.

fostering productive dialogue on this issue, ensure stakeholder input at all stages of the dialogue, and support a policy environment in which Australia can continue to be a digital payments leader.

The Bank could also require acquirers to pass on the true cost to merchants processing via LCR as opposed to blended pricing for all transactions.

Given these alternatives, Visa does not see the need to change the card production, personalisation, and terminal priority management, which introduces unnecessary and additional complexity, risk, and cost to the ecosystem.

Unintended consequences

In addition, Visa has a number of concerns regarding the possible unintended consequences related to the RBA's consideration of this proposal. Firstly, the Bank's drive for enablement of LCR may lead to less merchant choice (MCR). Given that acquirers have made LCR almost universally available in the market today, **we strongly encourage the RBA not to require acquirers to enable LCR – unless individual merchants specifically request enablement.** Requiring LCR enablement (as distinct from MCR) presumes that option is best for every merchant.

This approach does not take account of the fact that merchants may see advantages in choosing certain payment acceptance solutions based on a number of factors, such as value, guarantee of payment, system resilience, simplicity and innovation – rather than simply cost. As a result, merchant education that enables them to make their own fully-informed decisions on this matter is key. This approach supports competition across the industry and accepts that some merchants may not wish to enable LCR – which, in part, may explain why LCR enablement lags availability.²³ In addition, merchants should remain in control of their business decisions rather than be pushed to adopt LCR based on regulatory objectives that assume a one-size-fits-all solution, particularly when the ecosystem is already making notable progress. Further intervention in a well-functioning market where the RBA's policy objectives are already taking hold could have a negative impact on the small businesses that the RBA seeks to support.

Secondly, lack of consultation on mobile wallet provider solutions may lead to erosion of consumer choice and have other unintended consequences. Visa notes that in the RBA's October 2021 conclusions paper on the Bank's Review of Retail Payments Regulation, the RBA stated (following extensive industry and public consultation) that: "The Bank will engage with mobile-wallet providers that do not currently support the provision of both networks on DNDCs and encourage them to do so"²⁴. The RBA then announced in the November 2022 Payments System Board (PSB) update that following the Bank's discussions with industry participants the PSB "considers it to be both feasible and desirable for the industry to deliver LCR functionality for

²³ Ibid.

²⁴ Reserve Bank of Australia (2021), [Review of Retail Payments Regulation – Conclusions Paper – October 2021 \(rba.gov.au\)](https://www.rba.gov.au/publications/2021/10/conclusions-paper-october-2021), p6, p33.

mobile wallet transactions by the end of 2024". The PSB added a request for mobile wallet providers to inform industry of the designs of their LCR solutions as soon as possible.²⁵

While Visa appreciated that the Review of Retail Payments Regulation enabled public and industry-wide engagement, the RBA's approach of engaging directly with mobile wallet providers following the review did not include an open consultation process on this matter. This approach did not provide Visa and other industry participants with the opportunity to share perspectives on, among other things, the operational and consumer choice implications of the PSB's announcement for the broader payments industry. In particular, the RBA's engagement with the broader industry would have been beneficial to enable consideration of these factors, especially the erosion of consumer choice and the LCR solution(s) being considered by mobile wallet providers.

Tokenisation of DNDCs

Australia has seen strong and sustained growth in e-commerce payments in recent years. During the global COVID-19 pandemic, the ability to pay using e-commerce provided a lifeline to consumers and merchants. The shift from in-person payments to e-commerce gave consumers access to the goods and services they needed, even with social distancing mandates in place. In fact, a significant number of consumers and merchants used e-commerce for the first time. At the same time, e-commerce allowed many merchants to stay afloat through the pandemic, including many small businesses that offered online shopping or delivery services for the first time. Now, as the world continues to recover, we are seeing the e-commerce behaviours formed during the pandemic endure. According to the International Trade Administration, Australia is the eleventh largest e-commerce market in the world, with a predicted year-over-year rise of 15.5 per cent compared to a 3.4 per cent increase in the brick-and-mortar retail market from 2020 to 2024.²⁶

While e-commerce brings significant value to consumers and merchants, it also presents new fraud risks. Cybercriminals are targeting vulnerabilities in both the digital and physical worlds. Given the expansion in e-commerce, it is more important than ever to increase the focus on securing online commerce. Visa is dedicated to ensuring that e-commerce transactions are as secure, reliable and intuitive as they are in a physical store. We are also committed to partnering with our clients to facilitate secure and seamless card-not-present (CNP) experiences. Over the past five years, Visa has invested more than AU\$14.8 billion in technology, including to reduce fraud and enhance network security. And these efforts have been effective. In the year to April 2021, Visa's sophisticated artificial intelligence-enabled security helped financial institutions prevent more than AU\$354 million in fraud from impacting Australian merchants.²⁷

²⁵ Reserve Bank of Australia (2022), [Payments System Board Update: November 2022 Meeting | Media Releases | RBA](#)

²⁶ International Trade Administration, Australia Ecommerce (2020), <https://www.trade.gov/market-intelligence/australia-ecommerce>.

²⁷ Visa (2022), [Visa Annual Report 2022](#), p5.

One area of focus is to remove sensitive account data from the flow of payments so that compromised information cannot be used by criminals for fraud. Tokenisation – the process of replacing the traditional 16-digit payment card account number with a unique digital identifier or token – helps minimise fraud by offering financial institutions, merchants and third-party payment providers, such as digital wallet providers, a secure way to enable mobile and online payments without sharing sensitive account information. Tokens also offer dynamic data elements that make them more secure. If a token is somehow compromised by fraudsters, it can be replaced behind the scenes without requiring a new card number or physical card to be issued. As at the end of fiscal year 2022, Visa provisioned more than four billion network tokens, surpassing the number of physical cards in circulation.²⁸

Visa commends the RBA for its focus on tokenisation and agrees with the Bank’s assessment of the broad benefits tokenisation can provide to consumers, merchants and the ecosystem. The benefits of network tokens include:

- **Reducing fraud, increasing security:** Tokens convert a cardholder’s 16-digit PAN into a digital credential, replacing personal account information with a separate unique digital identifier. The assignee of the token (e.g., the merchant or wallet provider) can only use that credential for payment processing in a permitted and assigned domain, meaning that a stolen token has much less value. Conversely, a compromised PAN can be used across the ecosystem, thereby increasing fraud risk and associated costs to the industry, including dispute and chargeback processes and costs associated with reissuing physical cards. As token adoption continues to accelerate, we are seeing a corresponding year-over-year reduction in fraud rates for digital payments compared to PAN-based transactions.
- **Making payments more seamless:** Tokens offer dynamic data elements, meaning that if a token is compromised, it can be replaced behind the scenes without requiring the issuance of a new card number or physical card. PANs and associated cards details such as expiry dates and Cardholder Verification Values (CVV) can change during the account lifecycle and require manual updates by the cardholder. This creates consumer and merchant friction, a potential increase in decline rates and, in some instances, results in consumers abandoning transactions at checkout. Tokens have capabilities to allow the consumer to continue with a seamless payment experience without needing to update their payment information manually. This also supports continuity of payment for merchants, who no longer need to request updated card details from cardholders, thereby increasing authorisation rates and reducing abandonment at checkout.
- **Accelerating innovation:** Tokens support a multitude of digital purchase experiences, from in-app checkout using a digital wallet on a mobile device to e-commerce purchases with merchant card-on-file credentials. In addition to its security benefits, tokenisation has unleashed innovation across the ecosystem, enabling digital wallets on smartphones,

²⁸ Ibid., p8.

wearable devices like watches or rings and adding efficiency and security to online subscription services. This opportunity to innovate with built-in secure payments technology is virtually endless as cars, household appliances, and other devices become part of the broader 'internet of things' and offer secure purchase experiences.

Visa supports and encourages the use of tokenisation for online payments and the RBA's focus on this important issue. Below, we provide our responses to specific questions presented in the issues paper.

Consultation Question

4. What is the relative importance of addressing the issues regarding token portability, synchronisation and visibility?

Visa Response

Visa appreciates the opportunity to have participated in the working group sessions organised through AusPayNet and to provide our perspectives on the tokenisation of DNDCs for online payments. As the RBA notes in its issues paper, "the AusPayNet working group did not consider network tokenisation of DNDCs to be a factor inhibiting LCR for online DNDC transactions, primarily due to most ecosystem participants still retaining customers' PANs... However, PAN retention perpetuates the security risk that tokenisation is designed to address."²⁹ There are several implementation and operational best practices to fully realise the benefits of tokenisation, including those supporting token portability, synchronisation, and visibility. Visa agrees with the RBA (and the AusPayNet working group) that these are three key areas where industry alignment is necessary to ensure the full security and efficiency benefits of tokenisation. Visa works with clients and partners across the ecosystem – including issuers, acquirers, payment gateways and merchants – to support these practices. We address each in turn below.

Token portability: Visa understands token portability to mean that merchants have the choice to use tokens in a single or multi-gateway environment and the flexibility to port credentials between payment service providers. We offer capabilities that give merchants the choice to use one or multiple payment service providers simultaneously and enable merchants to port credentials when they choose to migrate to a different service provider. On the seller side, Visa enables merchants to be enrolled into our token program at the individual merchant level. This ensures that they can port their tokens to a different service provider or gateway, retain control over tokens originally issued under their domain and avoid the need to go back to the cardholder to re-collect payment credentials.

Token synchronisation: Visa understands token synchronisation to mean the ability for an issuer to relay changes to an underlying PAN to the acquiring side of the network via their scheme partner(s). Visa's token lifecycle management capabilities offer issuers the ability to update PAN

²⁹ Reserve Bank of Australia (2023), [The Australian Debit Card Market: Default Settings and Tokenisation \(rba.gov.au\)](https://www.rba.gov.au/publications/2023/04/the-australian-debit-card-market-default-settings-and-tokenisation), p9.

and token details in the event of a lifecycle event, for example, if a card has been reported lost or stolen and needs to be re-issued. Issuers can use Visa's capabilities to provide the new card details and ensure that any valid issued tokens held by merchants against that PAN reflect the new underlying credential.

Token visibility: We believe consumers should be provided with clear choices to exercise meaningful control over how their information is used, with whom it is shared, and for what purpose. In line with this principle, we agree that issuers (and through their issuers, cardholders) should have visibility to see which merchants have stored tokens for their cards. Visa has existing capabilities that can allow issuers to have visibility into the tokens issued against underlying consumer credentials. Furthermore, issuers should be able to update the status of a token or the underlying credentials in real-time to respond to fraud or card lifecycle events.

Visa continues to design, develop and deploy capabilities that take account of these considerations in the Australian market. Today, our network tokenisation program can support issuers and merchants to implement visibility, synchronisation and portability features as defined above. We are also developing a future-looking roadmap and pipeline of capabilities that we will continue to deliver for our clients.

Consultation Question

5. What are the potential solutions to these issues and their respective costs and benefits?

Visa Response

In the RBA's issues paper, the Bank cites the 2021 conclusions paper to the Review of Retail Payments Regulation, which put forth an expectation regarding the promotion of LCR using DNDCs in the online environment. The RBA further notes that tokenisation "needs to be implemented in a way that does not impede the adoption of LCR or competition in the acquiring market more generally".³⁰ The Bank has now set expectations for providers to offer LCR for online transactions and in mobile wallet transactions. Visa supports robust competition and consumer and merchant choice. We note, however, that security must serve as the foundation for the ecosystem in order to establish and maintain consumer and merchant trust and to protect the integrity of digital payments. No ecosystem participant – neither merchants nor payment networks – should eschew security for any transaction.

For this reason, and in consideration of the benefits highlighted above, Visa commends the RBA for its focus on moving from PAN retention to "the full security benefits of tokenisation"³¹. We agree with the RBA's assessment that "a key dependency as to when this can occur is the timing of the launch of eftpos' eCommerce tokenisation service"³².

³⁰ Ibid.

³¹ Ibid.

³² Ibid.

Consultation Question

6. What expectations could the Bank set for industry to address these issues, and the storage of PANs more generally, and what key details should be specified?

Visa Response

Visa agrees with the proposed RBA expectations outlined in 'Box C' of the issues paper.³³ As an overarching point, we agree that issuers and schemes should support network tokenisation. For all of the reasons detailed above and in the RBA's issues paper, network tokenisation makes payments more secure, provides for efficient and dynamic lifecycle management and helps drive innovation. Visa also supports industry participants, based on their role in the ecosystem, adopting or supporting token portability, synchronisation, and visibility – all of which underpin a robust, competitive ecosystem that supports future innovation. Finally, we agree that the removal of PANs once a credential has been tokenised by the merchant through their preferred scheme is a best practice that mitigates risk.

In addition to the expectations proposed in the issues paper, Visa recommends that all industry participants, specifically issuers and merchants, consistently implement card lifecycle management processes as offered by their preferred scheme(s).

Visa encourages the RBA to take a flexible, principles-based approach to the fulfilment of the proposed expectations in lieu of setting forth prescriptive implementation details. As long as the principles underlying the expectations are appropriately considered, we recommend that issuers, acquirers, merchants and schemes should be free to innovate and bring competitive value propositions to their respective clients and customers.

Consultation Question

7. Would the end of 2024 be a desirable and feasible timeline for the industry to support token portability, and to make substantial progress in removing PANs from the ecosystem?

Visa Response

As expressed above, Visa agrees with the underlying principle of removing PANs from the ecosystem and supports the timeline of the end of 2024 for enabling our clients and partners to implement the RBA's expectations. In addition, we regard this timetable as achievable.

Consultation Question

³³ Ibid., p10.

8. Should the Bank and the industry consider broader action to encourage the tokenisation of card payments and removing PANs, as seen in some other jurisdictions?

Visa Response

Visa assesses that the industry's goals should be to shift from the storage of PANs to the use of tokens for online payments. This will drive higher customer approval rates, lower fraud and reduce operational risk across the ecosystem. As outlined above, Visa recommends that the RBA take a flexible and principles-based approach to the implementation of its proposed expectations. Furthermore, a principles-based approach will encourage a competitive environment in which industry can continue to innovate and explore additional and enhanced opportunities to mitigate fraud and support a secure and seamless payments experience.

About Visa

Visa is one of the world's leaders in digital payments. Our mission is to connect the world through the most secure, reliable, and innovative payment network – enabling individuals, businesses, and economies to thrive. We facilitate global commerce and money movement across more than 200 countries and territories and among consumers, financial institutions, businesses, strategic partners, and government entities through innovative technologies.

In Australia, Visa has offices in Sydney and Melbourne. Together with our Australian financial institutions, fintech and business clients, and our technology partners, we are committed to building a future of commerce that fosters Australian economic growth, security, and innovation. Since 2020, Visa has worked with Global Sisters to provide business mentoring and coaching to aspiring businesswomen who recently graduated from Global Sisters' small business education program. In the same year, we launched #WhereYouShopMatters, an initiative focused on supporting Australian small businesses through education and promotion. Prior to this, Visa partnered with Quest Payment Systems and The Big Issue, the independent magazine sold by homeless, marginalised and disadvantaged people, to enable Big Issue vendors to accept digital payments.

Visa continues to enable new payment flows and expand acceptance across the payments ecosystem, ensuring that every Australian can both pay and be paid in a secure and convenient way. We are realising this through Visa Fintech Partner Connect and the Visa Accelerator Program. The program provides Australian fintechs with access to Visa's technologies, networks, and solutions, enabling businesses to scale for the benefit of consumers, businesses and the economy. Regarding security, over a five-year period, Visa invested nearly AU\$14.5 billion in systems resilience, fraud management and cybersecurity, including tokenisation, Artificial Intelligence (AI) and blockchain-based solutions, to bring even more security to every transaction.³⁴ In 2021, Visa's AI-driven security helped financial institutions prevent more than AU\$354 million in fraud from impacting Australian businesses.³⁵ As commerce moves rapidly online, the threat landscape is also changing and, in response, Visa released its updated [Australian Security Roadmap 2021-23](#), given the increasing risk of cybercrime and scams facing Australian businesses and consumers. The roadmap highlights the steps that Visa is taking, together with industry, to continue securing digital payments in Australia.

³⁴ Visa internal data on global technology and operations investments, FY15-FY19. For further detail, see <https://usa.visa.com/visa-everywhere/blog/bdp/2019/12/24/investing-in-the-1577207091483.html>

³⁵ Visa (2021), "Visa's AI prevents more than \$350 million in fraud from disrupting Australian businesses", <https://www.visa.com.au/about-visa/newsroom/press-releases/visas-ai-prevents-more-than-350-million-in-fraud-from-disrupting-australian-businesses.html>