



RESERVE BANK OF AUSTRALIA

Speech

Real-time Payments in Australia

Ellis Connolly [\[*\]](#)

Head of Payments Policy Department

Opening Address to the Real Time Payments Summit 21/22

ICC, Sydney – 3 May 2022



Thank you for the opportunity to speak at the Real Time Payments Summit.

Ten years ago, the Reserve Bank conducted a Strategic Review of Innovation in the Payments System. [\[1\]](#) The aim was to foster cooperative innovation to improve the safety, efficiency and competitiveness of the payments system. The conclusions of that review set out some strategic objectives for the payments system of the future:

- The ability to make real-time retail payments
- The ability to make and receive payments outside normal banking hours
- The ability to send more complete remittance information with payments
- The ability to address payments in a relatively simple way.

This set the stage for the development of the New Payments Platform (NPP), involving many participants from across the payments industry and the Reserve Bank.

Today I am going to highlight what has been achieved in delivering real-time payments in Australia, along with the work that still needs to be done. I'll also raise some issues for us to consider as we look to the horizon.

The progress on real-time payments

The NPP we see today has largely met the strategic objectives set by the Reserve Bank in 2012. Most consumers and businesses can make and receive real-time payments 24 hours a day, every day of the year. These payments can carry more detailed remittance information. They can also be addressed more conveniently by using a PayID, such as a mobile number, email address or Australian Business Number (ABN). This is a significant improvement on the existing system of account-to-

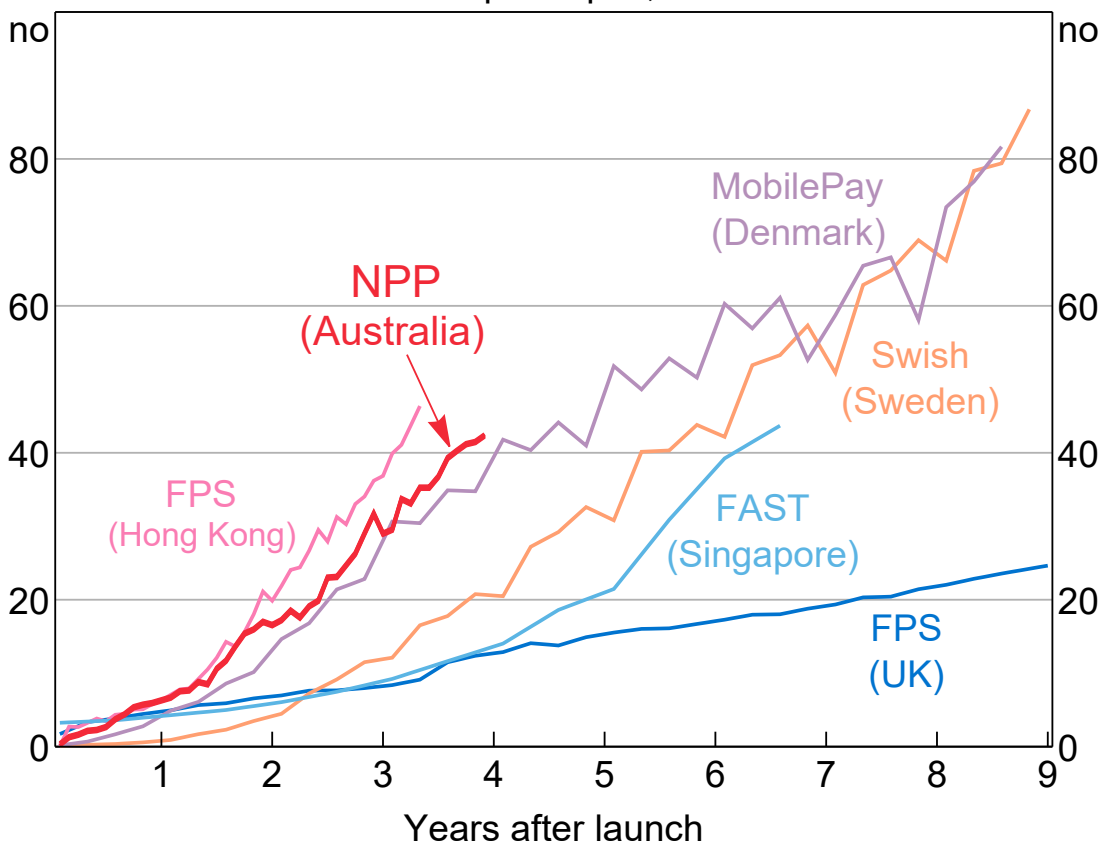
account payments – the Direct Entry (DE) system – where it can take hours or days for a payment to be processed, payment information is limited to 18 characters, and the payer has to know the Bank-State-Branch (BSB) and account number of the recipient.

Since its launch in 2018, the NPP has expanded significantly. Over the past year, the NPP processed more than a billion transactions, worth more than \$1 trillion. The share of account-to-account credit transfers that are made via the NPP has risen to around 30 per cent, including most 'pay anyone' transfers made through online banking. The rate of adoption of the NPP also compares favourably with other jurisdictions that have launched fast payment systems (Graph 1).

Graph 1

Use of Fast Payments Systems

Transactions per capita, annualised



Sources: FPSL; Getswish; HKICL; MAS; MobilePay; National statistics agencies; NPPA

There are now 107 financial institutions offering NPP payment services for almost 90 million customer accounts. While most of these are banks, there are also a number of non-bank institutions that are using the NPP to offer their customers faster payments and innovative services.

The Australian Government has also become a significant user of the NPP, with more than \$12 billion of payments for COVID-related support and disaster relief made via the NPP in the second half of 2021. The NPP enabled the Government to provide support to households affected by bushfires and floods in near real time, including on weekends.

Some areas that need to be addressed

We can all be proud of the substantial progress that has been made on delivering real-time payments in Australia. However, there is more work to be done to realise the full potential of the NPP. In 2019, the Reserve Bank conducted a public review on NPP functionality and access, with assistance from the Australian Competition and Consumer Commission. [\[2\]](#) In this report, we recommended that NPP Australia (NPPA) periodically publish a roadmap of the additional functionality it had agreed to develop. We also recommended that the NPPA Board have the power to mandate that agreed NPP core capabilities be supported by participants within a specified period of time.

Deliver the additional functionality in the NPP roadmap

There are two new business services in the current NPP roadmap that have the potential to deliver substantial benefits for end users.

The first of these is **PayTo**. This service will provide a convenient and secure way for households and businesses to authorise third parties to initiate NPP payments from their accounts. It will modernise the existing 'direct debit' system by giving customers more control. PayTo is a way to provide the payment initiation functionality that was envisaged under the Consumer Data Right (CDR). It will also open up new opportunities for innovation and has the potential to provide significant benefits for end users.

The industry had committed to launch the PayTo service in July this year, and the Reserve Bank's expectation was that this commitment would be met. Unfortunately, several of the major banks have recently indicated that they will not be able to meet this timeline. We recognise the considerable effort and investment required to develop PayTo, and the challenge of delivering multiple key payment initiatives at the same time. Nevertheless, these delays will significantly limit the availability of the service and the realisation of the benefits for end users. Given this, the Governor has written to the CEOs of the relevant banks to seek assurance that they will be ready to launch PayTo by no later than April 2023. To realise the full potential of PayTo, we also expect the banks to make the service available for their entire customer base.

The other major initiative on the NPP roadmap is the **international payments business service**. This will enable the Australian dollar leg of inbound cross-border payments to be processed by the NPP. In particular, additional data about the sender will be provided with the payment, making it easier for payment service providers to meet their compliance obligations related to financial crime. This service will result in safer and faster cross-border payments. The Reserve Bank expects the industry to remain committed to delivering the international payments business service in 2023.

Encourage use of PayIDs

We think there is also an opportunity for industry to more actively encourage their customers to sign up for and use PayIDs. They are a convenient and safe way of addressing payments. One of the key benefits of using a PayID is that the payer receives confirmation of the name of the person or business being paid before the payment is initiated. This reduces the chance that the payment will be mistakenly sent to the wrong account. It can also help guard against some types of scams, such

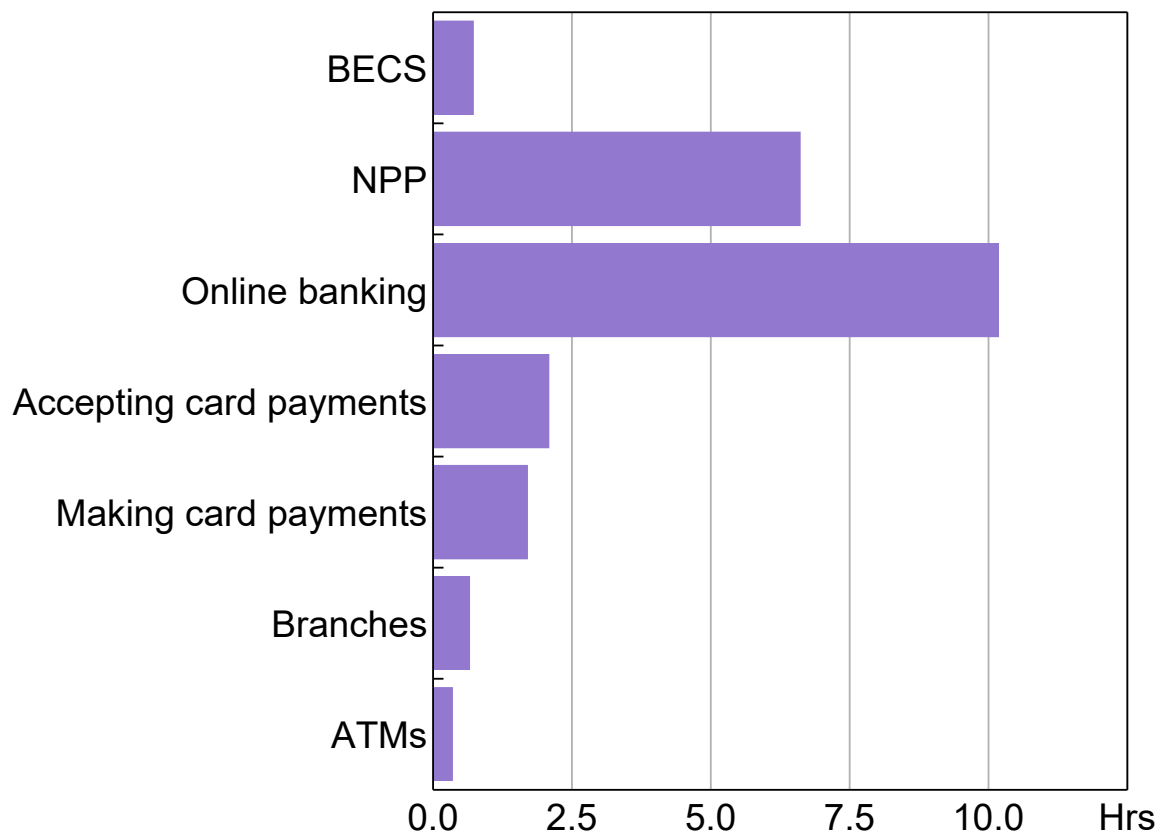
as where someone is deceived into sending a payment to a scammer's account rather than that of the intended recipient. Currently, there are around 10 million registered PayIDs in Australia, yet only 16 per cent of Osko payments are addressed using a PayID. The Reserve Bank would like to see the industry do more to promote the use of the PayID addressing system by their customers, especially businesses.

Improve the reliability of NPP services for end users

Another issue that needs attention is the reliability of NPP services provided by financial institutions. In the second half of 2021, three-quarters of payment service providers reported unplanned outages affecting their NPP services, with many experiencing multiple outages. [\[3\]](#) The average accumulated unplanned downtime per NPP service provider was almost seven hours (Graph 2). This figure is considerably higher than other 24/7 services such as card payment services, for which the average outage duration per service provider was around two hours. [\[4\]](#) A substantial amount of the NPP provider outage time occurred during the day (i.e. between 8am and 6pm), when customer service demand is at its highest.

Graph 2

Average Downtime per Provider Second half of 2021



Source: RBA

These outage data indicate that some industry participants need to do a better job of delivering reliable NPP services to their customers. The Payments System Board is closely monitoring NPP provider reliability, which will become increasingly important as usage of the NPP continues to grow.

Some issues to consider

Looking further ahead, there are a number of issues relating to the NPP that we should all keep in mind as we plan for the future.

Payment system access arrangements

Access to the NPP for payment service providers continues to be a focus area for the Reserve Bank. Access requirements are an important way for operators to manage risks to payment systems and their participants. At the same time, these arrangements should be as open and fair as possible to support the participation of service providers from across the payments ecosystem to encourage innovation and competition.

In the 2019 review, the Reserve Bank made a number of recommendations to support access to the NPP for a broader range of payment service providers. In response, NPPA has lowered the capital contribution required for authorised deposit-taking institutions (ADIs) to become direct participants. The governance process for approving applications for new participants has also been made more transparent and independent. However, non-ADIs are still not able to join the NPP directly to clear payments. Instead, they can choose to participate in the NPP indirectly, or as connected institutions to initiate payments. While it suits some non-ADIs to use the NPP this way, others would like to be able to participate more fully.

As part of the Australian Government's payments system reforms, the Reserve Bank has started work on a set of common access requirements to help support access to payment systems, including the NPP. The intention is that these requirements would be incorporated into the new licensing framework for non-ADI payment service providers that the Government agreed to develop. The Reserve Bank supports the development of such a licensing framework to reduce barriers to entry and support competition and innovation in the payments system. We are engaging with payment system operators as part of this process. To the extent that access requirements can be streamlined, standardised and made more transparent, this should make it easier for new entrants to participate in payment systems such as the NPP.

The future of the Direct Entry system

Another key issue is planning for the wind-down and eventual closure of the DE system. We expect that account-to-account credit transfers will continue to migrate from DE to the NPP. For payments that are currently processed in bulk across the DE system, such as payroll, institutions are working on how to send these via the NPP. The introduction of PayTo will also pave the way for direct debit payments to move to the NPP.

Given these developments, it is appropriate for the industry to be discussing when the DE system may be closed. As part of these discussions, the industry will need to consider at least three challenges:

1. Not all accounts that currently send and receive DE payments are reachable via the NPP. PayTo will also need to be available for a broad customer base. So before the DE system

can close, the reach of NPP will need to expand further to ensure that all accounts remain capable of sending and receiving payments.

2. As noted earlier, the reliability of NPP services for end users also needs further attention. This is particularly important if NPP is to become the sole retail account-to-account transfer system. If DE was closed, the current option to redirect NPP payments to the DE system during an NPP outage would no longer exist.
3. A lot of work will be required to bring end-users of the DE system on the journey. Many businesses and government agencies have DE payments embedded in their payments processing systems. NPP service providers will need to support these users in the transition to more modern payments processes.

The recent merger of NPPA, BPAY and eftpos to form Australian Payments Plus (AP+) should result in a more unified investment roadmap. This should provide industry participants with greater clarity when they are making decisions on when to invest in future payments capability. As part of this roadmap, we expect AP+ to be considering how best to support the winding down of the DE system.

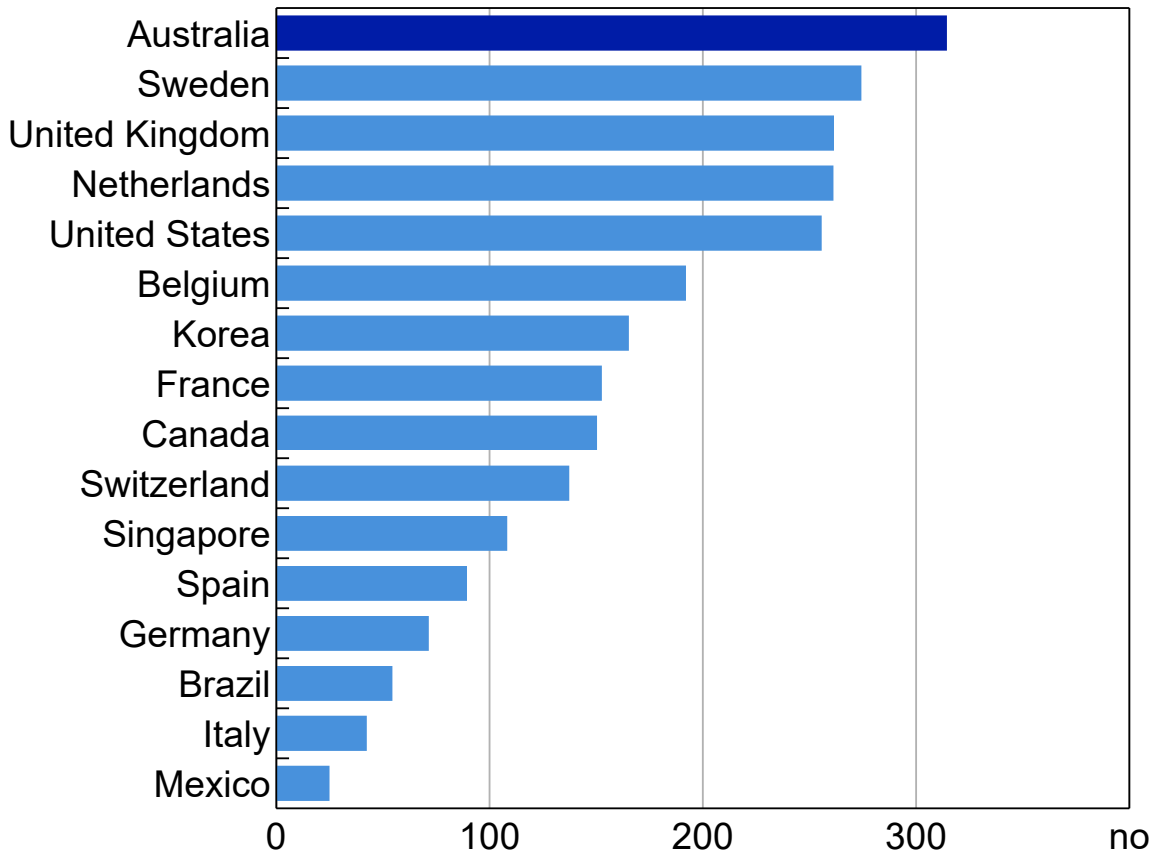
A competitive market for retail payments

Once the additional functionality for the NPP is delivered, another question is whether it can become an effective competitor to other established payment methods, such as card payments. In Australia, card payments are the dominant payment method for both in-store and online purchases. It is also interesting to note that Australians make debit card payments more frequently than in comparable countries (Graph 3).

Graph 3

Debit Card Payments per Capita

2020; selected countries



Source: BIS

In other countries with fast payment systems, we can see innovations emerging that provide alternatives to card payments:

- In Singapore, the customers of some financial institutions can make payments to merchants from their accounts using the fast payments system. There is an option to do this by scanning a QR code using a mobile application provided by the payment service provider.
- In India, some consumers can pay merchants in-store by tapping their smartphones at merchant terminals. However, rather than these payments being made from a debit or credit card stored in the mobile phone wallet, they are made directly from customers' accounts via the fast payments system.

Once PayTo is operational, the NPP could support similar innovations in Australia. NPPA has developed a standard for real-time payments using QR codes in person and online. [\[5\]](#) PayTo should then provide opportunities for such payments to be made to merchants using QR codes. Customers could also authorise merchants to debit their accounts for one-off payments or provide standing authorisations for recurring purchases. This functionality could enable the NPP to compete more directly with card payments in future, providing consumers with more payment options and placing competitive pressure on payment costs.

Enhancing cross-border payments

The NPP also has the potential to play a significant role in Australia's commitment to enhance cross-border payments. As the G20 has highlighted, payments made across borders via the banking system are too expensive, slow and opaque. The NPP's international payments business service should significantly increase the end-to-end speed of payments coming into Australia.

Efficiency gains could also be achieved by making sure that the NPP is interoperable with major payments systems in other countries. To support this, the industry should implement any internationally harmonised messaging and data practices in a timely way. Several countries in Southeast Asia are going a step further by linking up their fast payment systems to others in the region. This can remove the need for correspondent banks to intermediate international payments between these countries, increasing speed and reducing cost. Given these examples, we think it would be worth exploring ways in which the NPP could connect to fast payment systems in other countries in the future.

High-value payments and increasing oversight of NPP

So far, the NPP has almost entirely been used for low-value payments. Looking ahead, some high-value payments may also start to flow across the NPP. For instance, the introduction of the NPP's international payments business service should lead to some cross-border transactions for large businesses migrating to the NPP. We could also see the NPP being used for after-hours payments in financial markets. For example, in its role as a supervisor of systemically important clearing and settlement facilities, the Reserve Bank has recommended that ASX Clear (Futures) has the capacity to collect margin overnight to manage large price movements. Since the Australian high-value payments system is closed at that time, the ASX is instead collecting margin from its participants in US dollars. An alternative that the ASX is exploring is to instead collect this margin in Australian dollars using the NPP.

As the NPP grows in importance, it will naturally be subject to greater oversight. The Reserve Bank oversees systemically important payment systems operating in Australia, and regularly assesses their compliance with the international standards – the *Principles for Financial Market Infrastructures*.^[6] Given its current level of usage, we do not consider NPP to be systemically important. However, this may change in the future as the NPP grows, and especially if it is used by other financial market infrastructures, such as clearing and settlement facilities.

Reflecting the growing importance of the NPP to the economy, the NPP has been specified by the Australian Government as a critical infrastructure asset. The Government's reforms include new obligations to help bolster the reliability and security of critical infrastructure assets against cyber and other threats. The Reserve Bank is working with the Government to apply the obligations to NPPA, as the operator of the central NPP infrastructure.

Conclusion

The payments industry has made significant progress on delivering real-time payments over the past 10 years. This has been undertaken with a spirit of great cooperation. Nevertheless, there is more

work to be done. We expect the industry to implement the NPP roadmap, encourage use of PayIDs and improve the reliability of NPP services for end users. The NPP has developed into an important piece of national infrastructure that is supporting further innovation. I look forward to hearing more today about how you are leveraging this infrastructure to enhance the safety, efficiency and competitiveness of our payments system.

Endnotes

- [*] I would like to thank Elizabeth Kandelas, Georgia Wiley, Grant Turner and Adnan Arif for their excellent assistance in preparing this talk.
- [1] See RBA (2012), 'Strategic Review of Innovation in the Payments System', available at: <https://www.rba.gov.au/payments-and-infrastructure/payments-system-regulation/past-regulatory-reviews/strategic-review-of-innovation-in-the-payments-system/conclusions/pdf/conclusions-062012.pdf>
- [2] See RBA (2019), 'New Payments Platform Functionality and Access: Conclusions Paper', available at: <https://www.rba.gov.au/payments-and-infrastructure/new-payments-platform/functionality-and-access-report.html>
- [3] Similar patterns were observed from data collected over the previous few years.
- [4] An outage is generally defined as a significant disruption affecting at least 10 per cent of customers, transactions or service points for at least 30 minutes. These data are published on the websites of 34 retail payments providers. For more information, see RBA, 'Disclosures on Retail Payments Service Reliability', available at <https://www.rba.gov.au/payments-and-infrastructure/resources/reliability-disclosures.html>
- [5] One of the undertakings made by NPPA, BPAY and eftpos as part of their merger to form AP+ was to agree on an industry-wide standard to support QR code payments in Australia.
- [6] CPSS-IOSCO, *Principles for financial market infrastructures*, CPSS Publications No. 101, Bank for International Settlements, April 2012, available at: <<http://www.bis.org/publ/cpss101a.pdf>>

The materials on this webpage are subject to copyright and their use is subject to the terms and conditions set out in the [Copyright and Disclaimer Notice](#).

© Reserve Bank of Australia, 2001–2022. All rights reserved.

The Reserve Bank of Australia acknowledges the Aboriginal and Torres Strait Islander Peoples of Australia as the Traditional Custodians of this land, and recognises their continuing connection to Country. We pay our respects to their Elders, past, present and emerging.