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New Payments Platform

New Payments Platform Australia's submission
to the Senate Select Committee on
Financial Technology and Regulatory Technology

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Introduction

This paper is NPP Australia Limited's (**NPPA**) submission to the Senate Select Committee on Financial Technology and Regulatory Technology. NPPA is the special purpose or joint venture company established to oversee the development and operation of the New Payments Platform (**NPP**).

This paper covers a range of topics related to the NPP including an overview of the platform, progress since launch, NPP functionality and access, the highlights of which are summarised below.

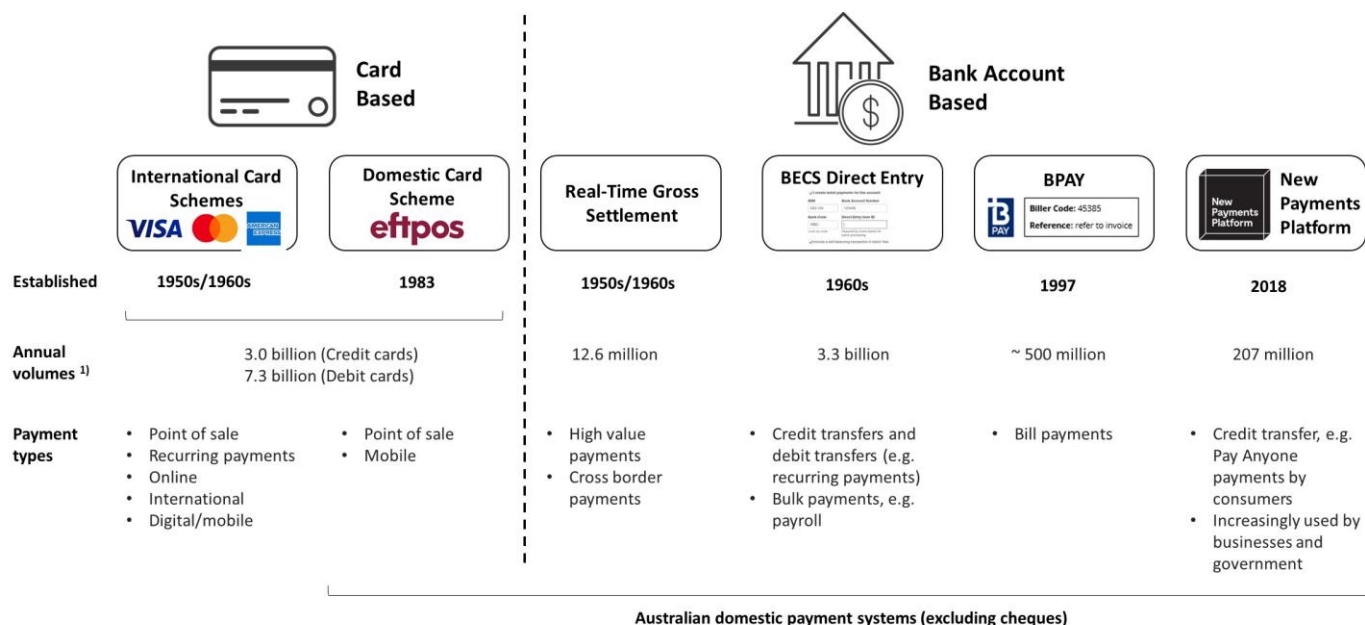
Summary of NPPA's submission

- The NPP is operated as utility payments infrastructure on a non-profit-maximising basis with a range of different access options.
- More than 66 million account holders can now make and receive payments via the NPP (~90% of accounts that will eventually be reachable).
- Platform has been in operation for less than 2 years and is still maturing in terms of access providers.
- The NPP has been intentionally designed to be 'open access', encouraging broad participation across the payments ecosystem.
- The initial functionality is a relatively simple credit transfer, named Osko, which often carries a small amount of unstructured data or a reference ID, which is mainly used for individual "pay anyone" payments.
- NPP's recently published roadmap sets out future functionality that is currently in development, including support for certain data-rich payment types and broad payment initiation capability (the capability most frequently requested by the market and often referred to as "write" access under Open Banking).
- This capability will meet the needs of many fintechs and other third parties and will support a range of use cases.
- The NPP access framework has been designed to balance access while incorporating sufficient safeguards to ensure the safety and security of a real-time payments system and the ongoing protection of customers.
- A number of organisations, including wholesale payment service aggregators, offer connectivity services to the NPP.
- The vast majority of organisations, including large financial institutions, are choosing to connect indirectly to the NPP as a lower cost, lighter integration option for providing NPP payment services to their customers.
- Greater availability of APIs will help provide more fintechs, corporates and businesses with the ability to utilise the NPP.
- The creation of a new class of regulated non-financial institution payment service providers could support increased access, particularly by providing increased confidence to sponsoring organisations about the capabilities and compliance status of those seeking access.
- Over time, we expect to see increasing competition in the market for NPP connectivity services and a greater level of maturity of this ecosystem.

Australia's payment landscape and the NPP

Australia has a number of different payment streams, many of which have been operational for decades with very mature ecosystems and ways of accessing which have evolved over many years, as shown below:

Payment Systems operating in Australia



¹⁾ Number of Transactions; Source: RBA payments data – Card volumes from Nov 2018 to Oct 2019, RTGS volumes calculated from daily averages from Dec 2018-Nov 2019, BECS Direct Entry and NPP volumes from Oct 2018-Sept 2019

The NPP is modern payments infrastructure that is intended to sit alongside these existing payment streams. It has been designed to support a modern 24/7 digital economy by providing a fast, flexible and data-rich payments system that enables Australian consumers, businesses and government agencies to make and receive data-rich payments in real-time between bank accounts, 24 hours a day, 7 days a week, 365 days of the year.

Operating as mutually owned utility payments infrastructure, the NPP was commissioned and funded by NPP Australia Limited's (NPPA) founding shareholders¹ (both large and small financial institutions and including the Reserve Bank of Australia), for and on behalf of the Australian payments industry. The NPP operates as an economically self-sustaining entity rather than profit-maximising or providing returns to its shareholders. NPPA's operating costs are recovered from shareholders via wholesale operating charges.

The NPPA Board has 11 voting directors - a nominee from each of the four major banks, four nominees elected by the small to medium banks and aggregators, two independent directors and a representative from the Reserve Bank of Australia. The voting rights of directors are equal and are not proportionate to shareholding, with each director having one vote. A third independent Director will join the Board in February 2020.

Around 54 similar real time payment systems operate around the world – with the Japanese system among the first to go live in 1973, the UK system in 2008, and Singapore in 2014. Europe, Canada and the US are in the process of rolling out their systems or are still in the planning stages.

¹ Current shareholders: Australia and New Zealand Banking Corporation, Australian Settlements Limited, Bendigo and Adelaide Bank Limited, Citigroup Pty Ltd, Commonwealth Bank of Australia, Cuscal Limited, HSBC Bank Australia Limited, Indue Limited, ING Australia, Macquarie Bank Limited, National Australia Bank Limited, Reserve Bank of Australia and Westpac Banking Corporation.



Australia's system is generally considered one of the first of a new generation of real-time payments systems – characterized by a layered infrastructure model, an open-access philosophy which incorporates a number of different access options for organisations with different needs, transaction volumes, and regulated status, and incorporating the ISO20022 data standard to enable data-rich payments between businesses.

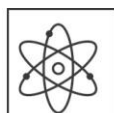
Different systems worldwide incorporate varying levels of functionality – with some introducing new functionality over time. Australia's system went live with a credit transfer (or “push” payment) in 2018 and has recently committed to introduce payment initiation (or “pull” payments) in late 2021. By contrast, the UK system has operated for 11 years and offers essentially the same functionality today as was available at launch: a credit transfer with no pull payments, a limited addressing service without porting capability, and no data-rich messaging.

Australia's New Payments Platform is:

- Operated as utility payments infrastructure on a non-profit-maximising basis with a range of different access options
- Unique among other Australian payment clearing streams because its board governance model incorporates equal representation regardless of size and scale
- Advanced in its design and operating model, with an ambitious plan for capability development like “pull” payments
- Less than 2 years into operation and immature relative to other Australian clearing streams which have been in operation for many decades and which have long established access points

Benefits of the NPP

The NPP has extensive capabilities, in particular:



Speed

Real-time movement of funds and immediate funds availability



Always on

Always available, processing payments 24 hours a day, seven days a week, 365 days a year with no cut off times



Data enriched

Extensive data capabilities with the ability to carry additional data with the payment using the ISO 20022 message structure.



Simpler addressing

Simple addressing through an easy-to-remember identifier (a PayID) which has been linked to an underlying bank account.

In contrast to other Australian domestic payment streams, payments made by the NPP move funds in real-time between bank accounts, are available 24 x 7, 365 days a year and can carry more data.

The NPP includes an addressing service called 'PayID', which allows users the choice to address payments to a registered phone number, ABN or email address (instead of to the payee's BSB and account number). PayID provides assurance that the person being paid is the intended recipient. Once established, a PayID can also be moved between bank accounts at different financial institutions, thereby assisting with specific bank account portability issues.

The NPP has been designed to support all sorts of payment types, ranging from consumer P2P payments, through to more complex B2B and government payments. By modernizing electronic payments, the NPP can be used to deliver back-office efficiencies and cost savings to Australian businesses and government agencies, laying the foundation for future payments innovation.

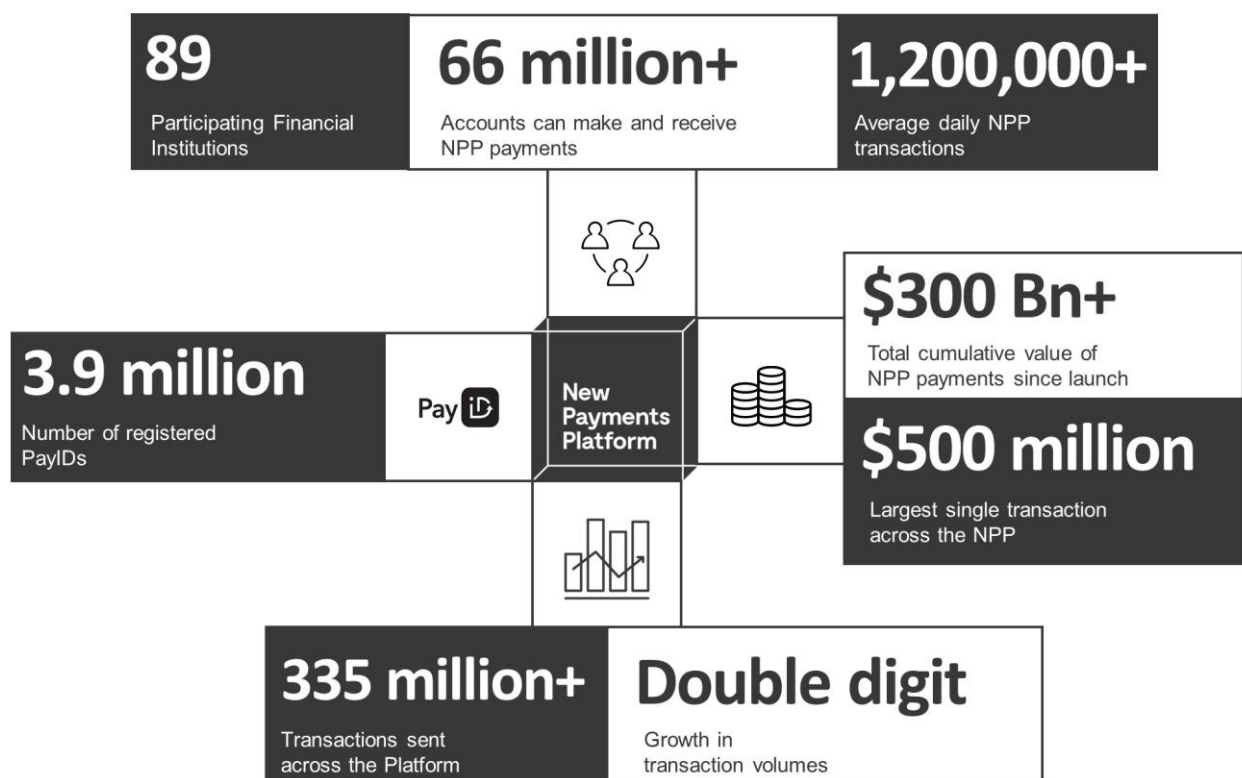


Progress since launch

The NPP became available to the public in February 2018. Since then, approximately 89 banks, credit unions, building societies and fintechs² have connected to the NPP (either directly or indirectly) to provide fast payment services to their customers. More than 66 million accountholders can now make and receive payments via the NPP (estimated at about 90 per cent of all accounts that will eventually be reachable) and this number continues to grow as existing financial institutions rollout capability to their customers and new institutions come on board.

The initial service launched on the platform is Osko, managed by BPAY, which is a fast payment service that can carry up to 280 characters of unstructured remittance information with the payment message.

The number and value of transactions going through the NPP have grown steadily since launch. During the month of December, participating financial institutions are now processing an average of approximately 1.2 million NPP payments worth an average of ~\$1.2 billion each day. The largest single transaction settled on the platform so far was for \$500 million.



As at 23 December 2019

² See <https://www.nppa.com.au/find-an-institution/> for more information on who is participating in the NPP

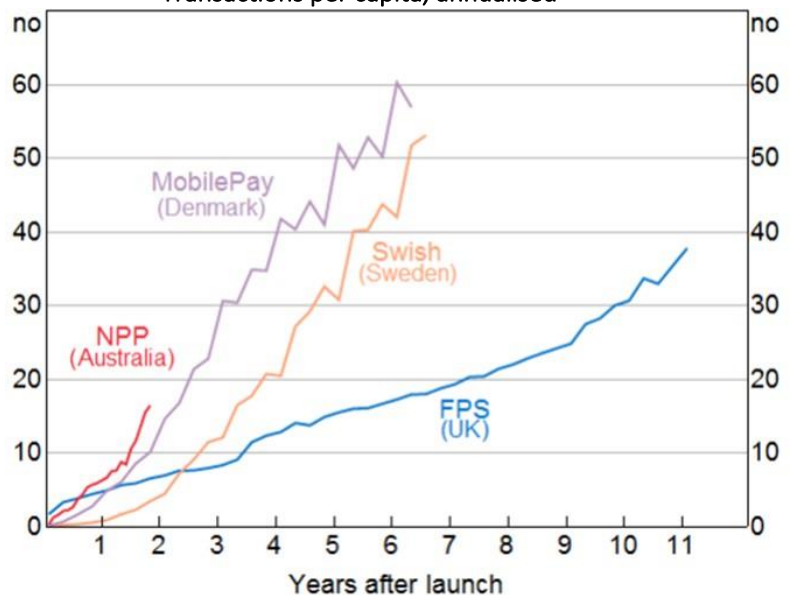


According to analysis by the Reserve Bank of Australia, as shown in the graph on the right, the adoption of the NPP is proceeding at least as quickly, if not faster, than the take up of real time payments in other overseas markets.

About 15% of bank account to bank account credit payments now travel by the NPP.

Most single payments (sometimes called “pay anyone” payments) made by individuals, businesses or government, often with a small amount of unstructured data, which would previously have been sent via the bulk electronic clearing system (BECS Direct Entry) are now being automatically routed by financial institutions over the NPP.

Use of Fast Payments Systems
Transactions per capita, annualised



Sources: FPSL; Getswish; MobilePay; National statistics agencies; NPPA
Source : A Payment System for a Digital Economy, RBA Governor Philip Lowe, 10 Dec 2019

Fast payment services are now widely available to Australian retail customers and the number of businesses and corporates using the platform is growing. Today, approximately one in three NPP transactions involve either a payment to or from a business. As participating financial institutions and third-party payment providers roll out NPP services, businesses are benefiting from real-time payments from their customers, real-time payment validation and automated reconciliation.

While faster payments can be sent to (one of 66 million) accounts using a BSB and account number, they can also be sent to a PayID which is linked to a bank account. Approximately 3.9 million PayIDs have been registered by customers who want to receive faster payments to their bank account via their PayID, with this number growing at ~150,000 per month.

The platform is also increasingly being used by government agencies, to provide instant financial assistance to people in difficult circumstances. For example, Centrelink used the NPP to distribute instant emergency assistance, including Disaster Recovery payments following recent floods and bushfires.






Summary of NPP progress:

- More than 66 million accountholders can now make and receive payments via the NPP (~90% of accounts that will eventually be reachable).
- Use of the NPP is growing as fast, or faster, than many other similar schemes in other countries.
- The initial functionality is a relatively simple credit transfer, named Osko, which often carries a small amount of unstructured data or a reference ID, which is mainly used for individual “pay anyone” payments.
- This functionality is being used by individuals, businesses, and governments for a range of use cases, including a number of fintechs.

Organisations using the NPP

We are starting to see a number of organisations using the platform's capabilities to make and receive NPP payments, ranging from new neobanks, payment service providers, cross-border remittance companies and cryptocurrency exchanges, fintechs, corporates and government agencies.

Some examples of how organisations are using the NPP are illustrated below³:

 <ul style="list-style-type: none"> • Assembly Payments is a payment solution provider offering businesses with a range of payment options • Assembly was the first non-bank payments platform provider to offer instant money transfers via the NPP to its customers 	
 <ul style="list-style-type: none"> • Block8 is a blockchain technology company using the NPP to combine fast payments with blockchain to create new products and services, such as myStake, an equity management, compliance and share register platform 	<ul style="list-style-type: none"> • Azupay is a consumer-to-business payment service which uses the NPP's speed and PayID to deliver real-time validation and processing for online payments, enabling businesses to get paid by their customers in real-time
 <ul style="list-style-type: none"> • As the latest non-bank to join the NPP, Monoova offers businesses real-time account payables and receivables functionality via a single API integration to its enterprise-level payments solution 	 <ul style="list-style-type: none"> • Earnd is a fintech using the NPP to facilitate payments aimed at enabling 'financial wellness' with employees able to access their income as they earn it in real-time

³ See www.nppa.com.au/category/case-studies/ for a number of case studies on the platform

NPP Functionality

NPPA is committed to ongoing investment to extend and enhance the capability of the platform to meet the needs of participating financial institutions, payment providers and users of the wider payments ecosystem. NPPA is focused on building broad native capability beyond simple credit transfers, which is flexible and extendable and governed by an appropriate rules framework, to support a broad range of use cases.

NPPA recently published a roadmap of planned capability development with associated timelines for delivery, which has six areas of focus⁴:

- | | | |
|---|--|--|
| 
1. Development of NPP message standards to utilise the NPP's structured data capabilities | 
2. Development of a 'Mandated Payments Service' to support recurring and 'debit-like' payments on the NPP | 
3. Implementation of payment initiation capability across the platform ('Basic Payment Initiation Service') |
| 
4. Implementation of services to support the domestic leg of an inbound cross-border payment (IFTI) | 
5. Supporting the use of QR codes on the NPP | 
6. Extension of the NPP API framework and an upgrade of the API sandbox |

Collectively the development and delivery of the capabilities in the NPP roadmap will significantly enhance the platform's functionality and drive further use of the platform by third parties.

Based on NPPA's experience, the vast majority of organisations want to use the NPP and its native capability (and associated rules framework that governs the capability's use) in order to meet their business needs. Utilising the platform's native capability requires a commercial relationship with only one participating financial institution as payment messages sent via one financial institution as an access point can reach all of the 66+ million available accounts on the NPP.

This is akin to providing 'building blocks' that others can put together in different ways to deliver payment products and services unilaterally outside of the platform. This will help drive competition and innovation 'at the edges'. It is our expectation that the future capability development outlined above will meet the needs of many fintechs and incorporates the feedback that we have received from the fintech segment in terms of what capability is most desired by them.

Supporting third party payment initiation

The NPP currently supports credit transfer payments or "push" payments, where a customer authorises payments to be made from their account at the time of providing the authorisation. The functionality that NPPA is asked most often about is the ability to initiate payments from a customer's account, either by a third party requesting payment or a third party authorised by a customer to initiate payments from that customer's account.

NPPA is developing capability to enable customers to authorise accredited third parties to initiate payments from their accounts via the NPP, governed by a rules framework that provides for the processing of the payment initiation messages, as well as a robust and comprehensive liability model.

⁴ More information on the NPP roadmap is available at https://nppa.com.au/wp-content/uploads/2020/11/NPP-Roadmap-2019_28-Oct-2019-final.pdf.



Central to this proposition is the account holder's authorisation (or consent) for payments to be initiated from their account with the creation of a digital payment arrangement or a 'mandate' in advance of the payments being processed. This functionality increases the visibility and control that account holders have over these various payment arrangements, which will resolve some of the most significant pain points with these kinds of payment arrangements today.

This core foundational capability will enable a range of use cases in the future, such as recurring or subscription type payments, ecommerce and 'on behalf of' services such as a corporate using a cloud accounting software provider to do their payroll run. Having a standardised and consistent approach to this payment initiation capability will maximise the utility of the capability and provide a broad, scalable approach to third party payment initiation.

The development of this critical capability will involve a considerable change effort to implement, requiring change to financial institutions' existing back office processes and systems. All NPP participating financial institutions are required to implement this capability by December 2021. It is anticipated that financial institutions will begin to roll out services utilising this capability in early 2022.

The delivery of this NPP capability will result in effective 'write' access (as seen in other markets such as in Europe), enabling third parties to initiate real-time payments via one access point, from one of the 66 million connected accounts, with the account holder's authorisation (or consent) without the need for additional infrastructure development by financial institutions.

Summary of NPP functionality:

- NPP's recently published roadmap sets out the capability that will be delivered over the next couple of years, including capability which is designated as mandatory by NPPA under its operating rules.
- The core mandatory capability includes support for certain data rich payment types by end 2020 and broad payment initiation capability by end 2021.
- Payment initiation capability (either by creditor or 'on-behalf-of' the debtor) is the capability which is most frequently requested. It will also deliver aspects of what is sometimes referred to as "write" access under Open Banking.

Facilitating third party access to the NPP

The Senate Select Committee Issues Paper raises the specific question of *"is the New Payments Platform accessible enough for FinTech start-ups and scale-ups? If not, how should this issue be addressed?"*

Most payment systems (including Australia's legacy payment systems) have an access model which resembles concentric circles. A small number of organisations directly connect, with a larger number of others accessing the payment system indirectly via a sponsor, and the NPP works similarly, although there are some nuances.⁵

The NPP has been intentionally designed to be 'open access', encouraging broad participation across the payments ecosystem. One of the three stated constitutional objectives of NPPA is ***facilitating fair access to the NPP as mutually owned utility infrastructure***.⁶ It is the first clearing and settlement system in Australia to be designed with access as one of its primary objectives.

NPPA has established graduated, risk-based, eligibility criteria, with relevant ACCC authorisation, for a range of different access points to the infrastructure⁷. These access points are intended to meet the needs of different organisations, ranging

⁵ Particularly a Connected Institution which could, in the future, submit payment initiation messages (when available for use) using their own payment gateway, which are then cleared and settled by other Participants.

⁶ NPP Australia Limited, Constitution, Article 2.1

⁷ See NPP Regulations for further information here: <https://nppa.com.au/the-company/governance/>

from APRA-regulated Authorised Deposit-taking Institutions (**ADIs**) through to corporates and fintechs. NPPA's overarching objective in determining the most appropriate access framework has been to balance fair and equitable access to a range of parties in various ways, with sufficient safeguards to ensure the safety and security of the payments system and the ongoing protection of customers.

As with other payment streams, there are a number of different connection options catering to market participants with different regulatory status, technology capability, risk and compliance capabilities, and with different cost implications in terms of upfront versus ongoing fees. Some of these options are briefly summarised in the table below (further information regarding all access options for the NPP is shown in Appendix A to this paper):

	Access Option	Examples of participating organisations	Overview of access option	Requirements and cost considerations
1)	Directly connected NPP Participant	<ul style="list-style-type: none"> Major banks – ANZ, CBA, NAB and Westpac Aggregators – ASL, Cuscal and Indue Others – Macquarie, RBA Banking 	<ul style="list-style-type: none"> Contribute capital to build and operate platform (investment required which will reduce over time) Extensive technical connectivity requirements Significant risks associated with direct connection (security, fraud, etc.) Manage own compliance and risk Must commit to bi-annual releases and additional mandated functionality Need to be an ADI (including restricted ADI) if performing clearing functions 	<ul style="list-style-type: none"> Charged a wholesale transaction price (set by NPPA) Fee charged by the RBA for settlement Overlay Service charges may apply High upfront costs (in order to meet high technical connectivity requirements)
2)	Identified Institution via directly connected NPP Participant	<ul style="list-style-type: none"> 77 organisations including credit unions and building societies Fintechs including neo-banks, Assembly Payments and Monoova 	<ul style="list-style-type: none"> Sponsored via directly connected Participant Compliance is managed by directly connected sponsoring Participant Do not contribute to build and operational costs of infrastructure Will generally, but not always, have a core banking system or 'journal of record' from which payments are made No requirement to be an ADI Tend to have some payments experience 	<ul style="list-style-type: none"> Lower upfront integration costs Generally "cost plus" transaction pricing (pass through of wholesale transaction fee plus margin)
3)	As a customer or 'end-user' of a directly connected Participant or an Identified Institution	<ul style="list-style-type: none"> Azupay Block8 Earnd Numerous crypto exchanges / 'on-ramps' 	<ul style="list-style-type: none"> Access generally provided via API Use cases will often include: <ul style="list-style-type: none"> Receiving a payment from an account held elsewhere ('push payment') (In future) initiating a payment from an account held elsewhere ('pull payment') Compliance and risk managed by directly connected Participant May have limited payments knowledge 	<ul style="list-style-type: none"> Possibly no or limited upfront costs Typically charged a transaction fee only



Connecting indirectly to the NPP

Direct connection to the NPP is likely to be a practical option for only a few organisations. Some of Australia's largest banks are among 77 organisations who have elected to access the NPP indirectly. The vast majority of organisations seeking access to the NPP do not want to connect directly because of the technical requirements that this entails, and the complexities involved in connecting to a real-time, 24/7 payments infrastructure (specifically operational, security, availability, and resilience requirements imposed by NPPA, as well as maintenance and functionality upgrades). By contrast, connecting indirectly provides organisations with a lower cost, lighter integration option for providing NPP payment services to their customers.

Given this, ensuring a competitive secondary access market to the NPP is important. Three groups of NPP participating organisations are currently playing a critical role in facilitating secondary access to the NPP for third parties:

1) Wholesale payment service aggregators (directly connected)

Three Participants, ASL, Cuscal, and Indue, act as aggregators, providing wholesale payment services to their customers (i.e. they have no end retail customers of their own). The business model of these organisations is to provide financial institutions with access to different payment clearing streams (RTGS, BECS Direct Entry, BPAY), as well as other payment products and services such as cards, mobile payments, ATM access and fraud prevention and management.

Aggregators help to promote competition in the payments industry by providing the technology, scale and licensing required that enables smaller players to operate alongside and compete with the largest players in the industry. Collectively, these aggregators provide services to a diverse range of organisations, including customer-owned banks, building societies, credit unions, mortgage originators, smaller and regional banks, neo-banks and other fintechs, as well as non-financial service organisations such as government bodies, airlines and retailers.

These aggregators are actively providing access to the NPP and are collectively connecting close to 70 organisations, thereby enabling those organisations to offer NPP payment services to their customers without having to contribute any capital to NPPA that would be required if they connected directly.

2) Bank agency service providers (directly connected)

A number of NPP Participants, including some of the major Australian banks, are providing (or plan to provide) third party agency services and indirect connectivity to the NPP to other financial institutions. It is anticipated that over time, these banks may also offer agency services to other non-bank entities such as large corporates and fintechs.

3) Other payment organisations (indirectly connected)

Two organisations, Assembly Payments and Monoova are connected indirectly to the NPP and are providing access and payment services to a range of business and fintechs. We expect the number of these to grow over time.

NPPA's website includes details of [five directly-connected Participants currently providing access to third parties](#). We expect this number to increase over time as more Participants extend their capabilities, including APIs for third party access.



Extending access via APIs

NPP Participants typically extend NPP connectivity services to their customers using APIs. In 2018, NPPA released an API Framework which defines the key technical approach and mandatory data attributes for NPP APIs including a number of sample APIs⁸. While NPPA does not mandate use of this API framework by Participants, it is intended to drive inter-operability, standardisation, and consistency in how organisations can use APIs to interact with the NPP.

NPP participating financial institutions are increasingly making APIs available in the market for use by third parties (NPPA itself is not publishing APIs for use on the NPP). Over time, these APIs will become more widely available (and most participating financial institutions have told us they expect to adhere to the NPP API framework when developing their APIs, thereby ensuring consistency in how these APIs are developed).

In collaboration with SWIFT, NPPA launched a testing sandbox environment in December 2018 that allows fintechs and other third parties to test the benefits and capabilities of the NPP using demonstration versions of APIs defined by the NPP API Framework⁹. This API sandbox, which currently has over 95 registered users, is hosted in the cloud and is intended to foster innovation and open up the NPP ecosystem to third parties. NPPA is currently working with SWIFT to upgrade the sandbox to a dynamic version, which will deliver greater utility to users.

As NPP participating organisations continue to extend their NPP enabled services to their customers and develop APIs consistent with the NPP API framework, we expect to see more fintechs, corporates and businesses using the NPP.

NPP Wholesale Transaction Cost

The cost of NPP transactions has sometimes been raised as an issue by fintechs. NPPA operates as an economically self-sustaining entity recovering its operating costs from its shareholders via wholesale operating charges. The NPP wholesale transaction cost is one of many input costs for financial institutions, including those levied by Overlay Service Providers, in some cases payment service providers or other system operators, and also by the RBA for the settlement of NPP payments.

NPP participating financial institutions unilaterally determine what prices are charged to their customers for an NPP transaction – typically, we have observed that these are free for retail customers in return for minimum deposit requirements while businesses and institutional or corporate clients are more typically charged for certain transactions.

NPPA has not yet established a wholesale transaction fee on a per transaction basis as current transaction volumes do not support the determination of a fee that would incentivise usage of the platform but intends to do so in the future, and to continue publishing the derived NPP wholesale transaction cost. As volumes on the platform grow, the wholesale transaction fee will come down and that same wholesale transaction fee will be charged to all NPP shareholders, regardless of size and the number of transactions that they are putting across the platform.

RBA / ACCC Consultation into NPP Functionality and Access

The RBA / ACCC recently conducted a review into NPP functionality and access. Following the recommendations published in June 2019¹⁰, NPPA has modified the NPP access framework, primarily:

- Removed the ADI requirement for organisations that want to participate as a Settlement (only) Participant, as well as halving the number of shares that a Settlement Participant needs to subscribe for, effective 1 November 2019;
- Provided for an annual reduction in the Issue Price of new shares in the company from 1 January 2023, such that by end 2027, upfront costs payable by prospective Participants will be 75% lower than the costs currently payable, while maintaining parity between them and founder shareholders in the same governance band; and
- Enabled the issuance of partly paid shares with payment for shares split into four instalments over a two-year period.

⁸ <https://www.nppa.com.au/the-platform/api-framework-and-sandbox/>

⁹ <https://nppa.com.au/wp-content/uploads/2018/12/SWIFT-and-NPP-launch-sandbox-for-testing-APIs-Media-Release.pdf>

¹⁰ https://nppa.com.au/wp-content/uploads/2019/10/RBA-Functionality-and-Access-consultation-recommendations_NPPA-Response_October-2019-updated-response.pdf



Observations from NPPA

In assessing whether the NPP is accessible enough for fintechs, it is important to note that the market for NPP secondary access services is still maturing, particularly for the fintech segment. In particular:

- The market for providing agency services to financial institutions is more well-established (having been around for a number of years) and is more homogenous. Organisations seeking access in this category tend to have the required technology (such as a core banking system), they are regulated entities with ADI licences, they tend to have a similar and lower risk profile and have higher transaction volumes;
- By contrast, the fintech segment is far more diverse and less homogenous, they typically have quite different risk profiles and capabilities, they may not have the necessary technology in place to support integration and their transaction volumes tend to be nascent; and
- NPP participating financial institutions are still developing some of the capability which is being actively sought by fintechs, primarily APIs. Over time, we expect this capability will become more broadly available.

In time, we expect to see increasing competition in the secondary access market and a greater level of maturity of this ecosystem. Even so, when comparing the NPP experience to other real-time payments systems overseas, the level of participation has been considerably higher with broader participation in a shorter time period than those seen in other markets.

A regulatory perspective

From a regulatory perspective, the Australian landscape is different from other comparable markets, principally with a gap in the regulatory landscape between AFSL licensing and ADI licensing. In the UK, a supervised regulatory framework for non-ADI specialist Payment System Providers (PSPs) has been created and these PSPs are permitted to connect directly to the UK Faster Payments Service (under a pre-funded settlement model). While these organisations may not have a banking or ADI licence, they are subject to conduct, licensing and supervision as a class of regulated entity that does not have a close equivalent in Australia.¹¹

The Council of Financial Regulators recently reported to the Government with recommendations regarding stored value facilities and the Reserve Bank of Australia has recently sought feedback from the market as part of its Review of Retail Payments Regulation, on whether there are potential approaches to licensing and regulation of non-financial institution payments service providers that would be in the public interest.

If at any point in the future, a new class of regulated non-financial institution payment service provider is created, then at that time, NPPA would consider how this category of organisations would fit within the NPP access framework, as NPPA did for organisations with Restricted ADI licences when this category was created.

More generally, NPPA believes that creation of an additional class of regulated entity would provide more confidence to existing sponsoring organisations about the capabilities and compliance status of those seeking access, and it would be a positive development.

¹¹ The closest analogy is PayPal which has a limited ADI licence allowing it to provide certain payment services, and which is regulated by APRA in some respects and carries regulatory capital. NPPA would allow PayPal to connect directly to the NPP in Australia, if it wanted to do so.



Summary of NPP access:

- The NPP has been intentionally designed to be 'open access', encouraging broad participation across the payments ecosystem.
- The NPP access framework has been designed to balance access while incorporating sufficient safeguards to ensure the safety and security of a real-time payments system and customer protections.
- A number of organisations, including wholesale payment service aggregators, offer connectivity services to the NPP.
- Vast majority of organisations, including large financial institutions, are choosing to connect indirectly to the NPP as a lower cost, lighter integration option for providing NPP payment services to their customers.
- Greater availability of APIs will help provide more fintechs, corporates and businesses with the ability to utilise the NPP.
- The creation of a new class of regulated non-financial institution payment service providers could support increased access.
- Over time, we expect to see increasing competition in the market for NPP connectivity services and a greater level of maturity of this ecosystem.

Conclusion and Recommendations

Over time, the number of organisations using the NPP will only continue to grow, with expected broad representation from financial institutions, corporates and fintechs.

The underlying native capabilities of the NPP in terms of speed, reach, extended availability, addressing features, governance and processing rules, settlement model, and future capabilities such as enhanced data capability combined with payment initiation capability, will meet most organisations needs and business objectives, particularly those of fintechs.

With the publication of the NPP Roadmap, organisations can start planning now for how they might best utilise the future NPP functionality that is scheduled to be delivered – particularly payment initiation capability.

A more diverse range of organisations providing NPP secondary access services is expected to emerge over time and knowledge and experience in dealing with the fintech segment will grow and mature.

Existing NPP Participants are likely to extend their capabilities to support secondary access, for example, by making available APIs which they may not today.

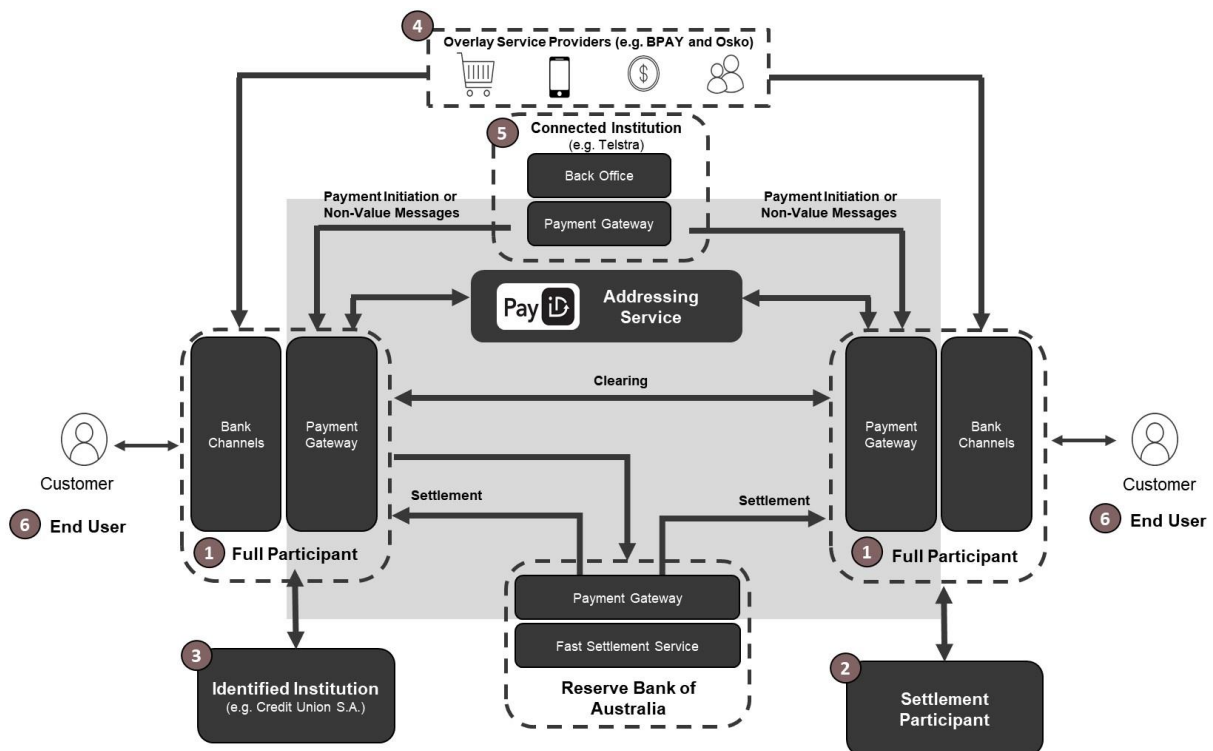
The creation of a new class of regulated non-financial institution payment service providers could support increased access, particularly by providing increased confidence to sponsoring organisations about the capabilities and compliance status of those seeking access.

Greater education and awareness between the fintech segment and financial institutions will help build understanding about how the platform works and what can be done with the platform's functionality (now and in the future). NPPA has conducted a number of these sessions individually and in groups and is happy to conduct more.

NPPA is happy to assist the Committee's deliberations and will continue to pursue measures to support the ability of fintechs to leverage the platform's capabilities.

Appendix A – Accessing the NPP

There are six different ways an organisation can access the NPP:



Category	Description
1. NPP Full Participant	<p>NPP Full Participants are organisations that can connect directly or indirectly to clear and settle payments via the NPP. All ADIs, whether fully or conditionally licensed, including a Restricted ADI licence holder, are eligible to become NPP Participants.</p> <p>A directly connected Participant needs to meet the technical requirements of standing up and maintaining an NPP Payment Access Gateway (PAG) in a real-time environment. NPP Participants are shareholders of NPPA and can participate in its governance processes in accordance with its published Constitution, including nominating a Director and/or electing Directors.</p>
2. NPP Settlement Participant	<p>An NPP Settlement Participant connects indirectly via a directly connected NPP Full Participant and can have NPP payments settled directly into their Exchange Settlement Account at the Reserve Bank of Australia.</p> <p>A Settlement Participant does not need to be an ADI. NPP Participants are shareholders of NPPA and can participate in its governance processes in accordance with its published Constitution, including nominating a Director and/or electing Directors.</p>

	Category	Description
3.	Identified Institution	<p>Any corporate can operate as an Identified Institution and can offer their customers real-time data-rich payments via a directly connected NPP Full Participant, who clears and settles those payments on their behalf. An Identified Institution does not need to be an ADI or a Restricted ADI and does not need to install and support an NPP Payment Access Gateway.</p> <p>This has been the most popular way of accessing the NPP as organisations do not need to meet either the technical requirements required for direct connectivity nor the capital required to be an NPP Participant (which requires becoming a shareholder in NPPA). The platform went live with over 50 Identified Institutions at launch, including many small financial institutions who were able to offer NPP payment services to their customers from day one. There are now 77 organisations currently accessing the NPP this way, including some fintechs, and more are scheduled to come on board in coming months.</p>
4.	Overlay Service Provider	<p>An Overlay Service is a product or service that uses the NPP infrastructure's capabilities, potentially in a customised way to define a bespoke payment service or process. The first overlay service launched from the platform is Osko by BPAY. Any organisation can become an Overlay Service Provider as long as it can demonstrate a sound business plan backed by the required expertise for their proposed product or service. Overlay Service Providers offer their product or service to NPP Participants and Identified Institutions to distribute to their customers. In our experience, many payments innovation or processes will not require an Overlay Service to be established but rather they will be able to leverage the existing service and native capabilities of the platform.</p>
5.	Connected Institution	<p>Connected Institutions can connect to the NPP directly by installing an NPP Payment Access Gateway in their own environment in order to be able to send non-value messages including payment initiation messages (when available). This could include payroll providers, share registries, retailers, large corporates, fintechs or organisations like Amazon, Facebook and Google. Because these organisations are not directly processing or clearing payments they are not required to be an ADI or Restricted ADI. However, given a Connected Institution is directly connected to the NPP they are required to comply with similar technical requirements for connecting directly as apply to NPP Full Participants, including resilience, 24/7 availability, security and the ability to meet performance SLAs and associated liability allocation obligations.</p>
6.	End User	<p>Businesses, corporates and fintechs, just like individuals, can use the NPP to make and receive payments. There are currently 87 organisations offering NPP payment services to their retail, business and corporate customers, thereby enabling NPP payments to be made and received from those accounts.</p>

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For further information, please visit www.nppa.com.au or email info@nppa.com.

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