

Payme
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Update on the New Payments Platform Roadmap

Enhancing the platform's capabilities

ments
novation



30 April 2020

NPP AUSTRALIA LIMITED
ABN: 68 601 428 737



The New Payments Platform



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

An easy-to-remember identifier (a PayID) which has been linked to an underlying bank account. Also provides confirmation of payee.

The New Payments Platform (NPP) is designed to support a 24/7 modern, digital economy. It provides a fast, flexible and data-rich payments system that enables Australian consumers, businesses and government agencies to make real-time payments between accounts at participating Australian financial institutions.

NPP Australia (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. In October 2019, NPPA published its inaugural roadmap¹ which outlined the future capability development planned for the platform. This document provides an update on the platform and the delivery of the NPP roadmap.

Progress since launch

The NPP became available to the public in February 2018. Since then, approximately 90 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 67 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 continue to rollout capability to their customers and new institutions come on board. With a few exceptions, almost all retail bank accounts are now enabled for NPP payment services with the vast majority of Australian financial institutions now part of the NPP.

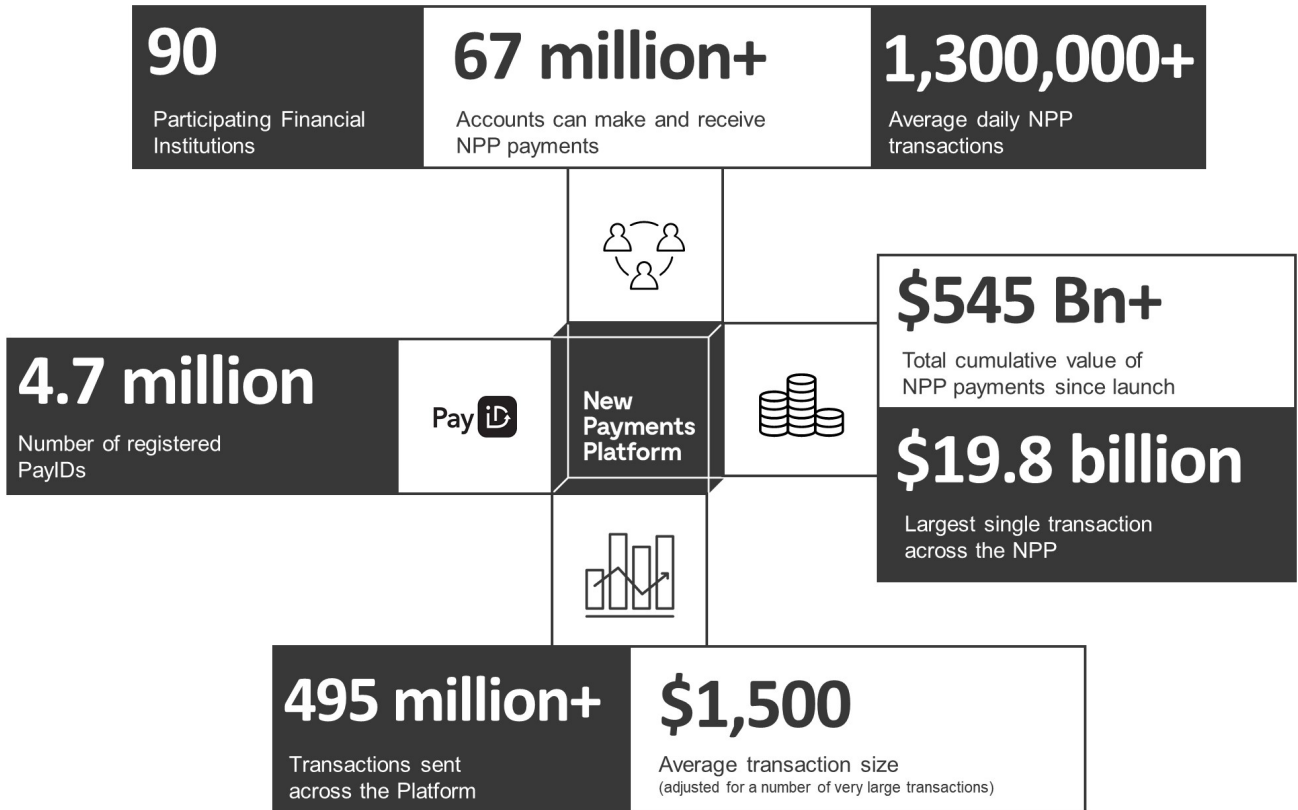
The number and value of transactions going through the NPP have grown steadily since launch. During the month of April, participating financial institutions are now processing an average of approximately 1.3 million NPP payments worth an average of more than \$4 billion each day. The platform recently processed close to \$24 billion in transactions in a single day and the largest single transaction settled on the platform so far is \$19.8 billion.

¹ NPPA 26 Nov 2019 https://nppa.com.au/wp-content/uploads/2019/10/NPP-Roadmap-2019_28-Oct-2019-final.pdf

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



NPP Fast Facts



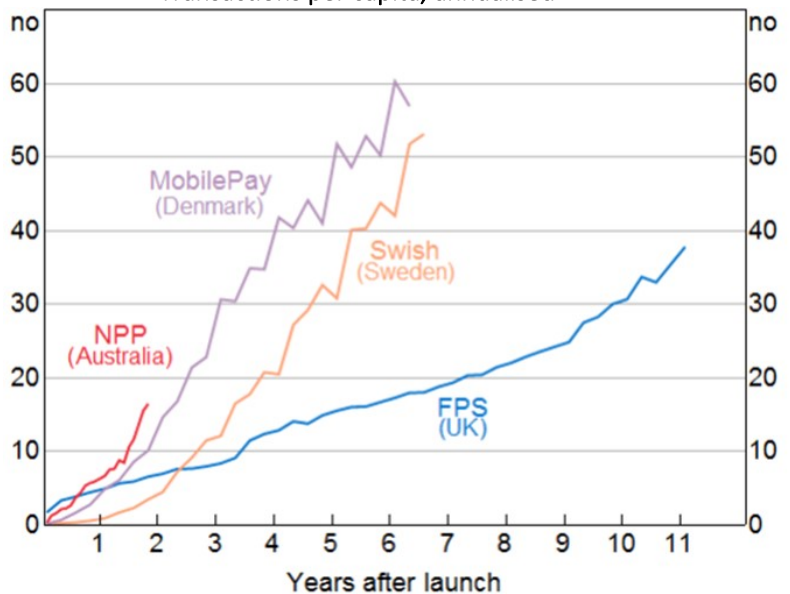
As of 27 April 2020

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.

Close to 20% of account to account credit payments now travel by the NPP.

Most single payments (generally referred to as “pay anyone” payments) made by individuals, businesses or government, 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



NPP 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 involves a payment either 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.

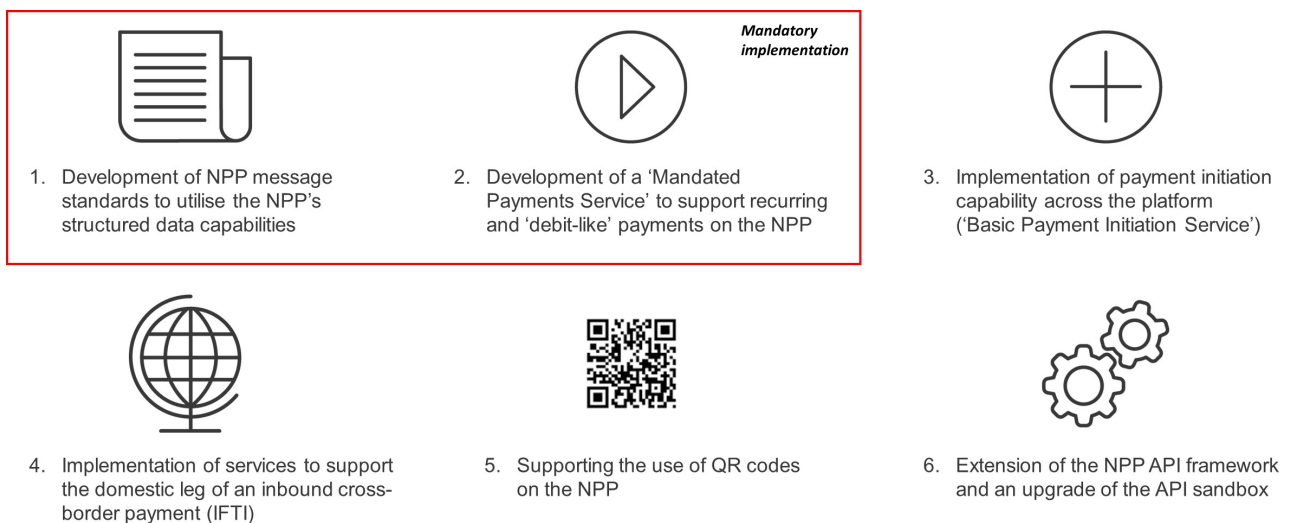
We continue to see a number of organisations using the platform’s capabilities to make and receive NPP payments, ranging from new neobanks, payment service providers, cross-border remittance companies and cryptocurrency exchanges, fintechs, corporates and government agencies. The NPP is also helping the Australian Government to respond to the COVID-19 pandemic by supporting real-time payments to government agencies charged with delivering policies and programs related to the crisis.

While NPP payments can be sent using a BSB and account number, they can also be sent to a PayID³ which is linked to a bank account. Approximately 4.7 million PayIDs have been registered by customers who want to receive payments to their bank account via their PayID, with this number growing at ~180,000 per month. NPPA has seen an increase in small businesses promoting PayID as a payment method during the current COVID-19 crisis. PayID is being used by small businesses as a simple and cost-effective way to assist cash-flow and enable contactless payments. A diverse range of small businesses such as restaurants and cafes, hairdressers, services like mobile dog washing and charities, some of which have had to pivot quickly to meet the challenges of COVID-19, are offering PayID as a means for their customers to pay them. PayID also helps to reduce mistaken payments and mitigate the risk of fraud and scams because, unlike standard bank transfers, confirmation of payee occurs prior to the payment being made.

Update on the NPP Roadmap: future native capability development

NPPA is committed to extending and enhancing the capability of the platform to meet the needs of participating financial institutions, payment providers and users of the wider payments ecosystem, whether it be for retail P2P payments or more complex B2B payments. Our focus is on building broad native capability beyond simple credit transfers, which is both flexible and extendable to support a broad range of use cases. Central to this is ensuring consistency and standardisation in how payments pass across the platform, and on delivering the minimum network effect required to enable different organisations to be able to pursue their respective commercialisation objectives.

In October 2019, NPPA published its inaugural capability development roadmap which had six areas of focus⁴:



³ For more information on PayID, see <https://payid.com.au/>

⁴ More information on the NPP roadmap is available at https://nppa.com.au/wp-content/uploads/2019/10/NPP-Roadmap-2019_28-Oct-2019-final.pdf.



Collectively, the development and delivery of the capabilities contained in the NPP roadmap will significantly enhance the platform's functionality and drive further use of the platform by third parties. Over the last 6 months since the roadmap was published, NPPA has been working with industry to progress delivery of these capabilities, particularly those mandatory capabilities which require implementation by all participating financial institutions. Updates on this activity are provided in further detail below.

The current COVID-19 situation has impacted the entire Australian economy including the financial services sector. Financial institutions, like organisations in many other sectors, have had to quickly enact plans to respond to the crisis and redeploy resources to focus on these plans. The full impact of the crisis is not yet known. NPPA is working with the industry to fully assess any impact that the crisis will have on the delivery of the NPP's capabilities, including those contained within the NPP roadmap.

NPP message standards - Bringing the data-rich capability of the platform to life

The NPP uses the ISO 20022 messaging format which can carry much richer information than the 18 characters currently available for Direct Entry payments. With more than 1,400 data fields available in the ISO clearing message, additional data can be carried end-to-end together with the payment or potentially with embedded references to documents hosted elsewhere.

The ability to carry additional data will deliver considerable utility not just for banks but also for the broader Australian economy (including corporates, small and medium sized businesses and government):



Business automation: *straight-through processing such as automating acceptance and payment of securities entitlements or invoicing*



Improved reconciliation: *automatically match a payment's origin and its purpose.*



Enriched reporting: *align to reporting standards and regulations*



Financial crime prevention: *including data such as a Legal Entity Identifier can help prevent financial crime*

NPPA has developed NPP message usage guidelines for payroll, tax, superannuation and e-invoicing payments on the NPP. The intention of this work is to start to utilise the structured data capabilities of the NPP payment message for specific payment types.

These message guidelines define the use of category purpose codes to identify these payment types and specific data elements that should be included in the payment message, effectively standardising how these payments will pass across the platform. This ensures a consistent approach to the treatment of data for these payment types and the consistent transmission of data from Payer through to Payee, making it easier for third parties to utilise the platform for these payment types. Further information on the NPP message guidance can be found on the NPPA website⁵.

This activity will support the growth of business use and commercial payment volumes on the platform. Market participants, such as payroll providers, cloud accounting software providers and superannuation gateways, can incorporate the specified NPP message usage guidelines into their product and service offerings to send payroll, tax, superannuation and e-invoicing payments via the NPP. Invoicing is a topic that is generating a lot of interest in the market with the introduction of the PEPPOL framework by the ATO last year. NPPA is working with industry on how the NPP can support invoicing and ensure interoperability with PEPPOL to deliver an integrated payments experience⁶.

⁵ See <https://www.nppa.com.au/the-platform/iso-20022-message-usage/>

⁶ See <https://nppa.com.au/einvoicing-and-the-npp/>



NPP participating financial institutions are obliged to **receive** NPP messages with additional defined data elements for payroll, tax, superannuation and e-invoicing payments by December 2020. Financial institutions can choose whether or not to support sending these payment message types according to the needs of their customer base and their individual commercial offerings.

NPPA continues to explore how the NPP message set can be further enhanced in order to fully leverage the data capabilities of the platform.

Mandated Payments Service - Supporting third party payment initiation

The NPP Mandated Payments Service⁷ (**MPS**) is core foundational capability which will enable customers to *authorise third parties to initiate* payments from their bank accounts using the NPP. This capability, governed by a rules framework and liability model, will provide the Australian market with a broad, scalable approach to third-party payment initiation for real-time account-to-account payments⁸. The ability for third parties to initiate payments on the NPP is the capability most frequently requested by the market.

The delivery of this third party payment initiation capability will enable a range of use cases including a better alternative to current direct debit payments, merchant initiated ecommerce and in app payments, 'on behalf of' services conducted by a third party, e.g. a corporate banking customer who authorises a cloud accounting software provider to manage their finance functions such as payroll, and various fintech applications and service offerings.

Customer authorisation is at the core of the MPS capability with the creation of digital payment arrangements or 'mandates'. These mandates serve as records of the customer's authorisation (or consent) for payments to be initiated from their account by a specified third party, in advance of any payments being processed.

From a customer perspective, the MPS will enable a more digital and enhanced customer experience. Customers will be able to digitally view, modify and manage the authorisations that they have established for payment initiation. Customers will also be able to more easily move their mandate payment arrangements from one bank account to an account at a different financial institution. This will increase the visibility and control that customers have over these various payment arrangements, resolving significant pain points with these kinds of payment arrangements today.

A key feature of the MPS is that third parties that want to initiate payments only require **one** access point to the NPP infrastructure in order to be able to initiate payments, with the customer's authorisation, from one of the more than 67 million currently NPP enabled accounts. This is an important difference from other markets, such as the UK, which have introduced third party payment initiation (often referred to as 'write access' under Open Banking) which requires third parties to integrate with multiple financial institutions in order to be able to initiate payments from customer's accounts. The approach adopted by the MPS removes the need for additional intermediaries to sit between third parties and accounts held at multiple financial institutions.

The development of this critical capability requires a considerable change effort to implement with significant change to financial institutions' existing back office processes and systems. All NPP participating financial institutions are required to implement elements of this capability by December 2021⁹. It is anticipated that financial institutions will begin to rollout services utilising this capability in early 2022.

NPPA recently published additional information on the MPS which is available on the [NPPA website](#).

⁷ Mandated Payments Service is currently an industry working title. Work is currently underway to determine a market facing name and identity for the service

⁸ As distinguished from card-based payments which might also be attached to bank accounts

⁹ NPP participating financial institutions are obliged to receive and process payment initiation messages and support account holder authorization and mandate maintenance functions for these NPP payments



Extending API capabilities

APIs play an important role in enabling third parties to use the NPP's capabilities and the development of seamless and integrated payment experiences. NPPA continues to work to enhance and extend API capabilities for the NPP.

NPP API Framework



The NPP API framework was developed by NPPA to drive inter-operability, standardisation, and consistency in the development of NPP APIs and how they can be used by third parties to interact with the NPP. In December 2019, NPPA released version 3.0 of the framework which incorporated additional sample APIs to support batch payments, including payment confirmation and the ability to get details of payments made via a batch process¹⁰.

NPP API Sandbox



In March 2020, in collaboration with SWIFT, NPPA launched a new dynamic version of the NPP API Sandbox, introducing additional features and capabilities to meet the evolving needs of the expanding NPP ecosystem. Now located in the cloud-based NPPA Developer Portal, the sandbox aims to foster innovation and open up the NPP ecosystem to third parties. It provides external parties access to an independent environment where they can build and test their NPP-based prototypes and solutions, using the NPP API Framework and sample RESTful APIs in JSON format¹¹. The sandbox currently has over 100 registered users.

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 NPPA they expect to adhere to the NPP API framework when developing their APIs, thereby ensuring consistency in how these APIs are developed). Greater availability of APIs will help provide more fintechs, corporates and businesses with the ability to utilise the NPP and its capabilities.

To support the delivery of the MPS capability, NPPA will be extending the NPP API framework to include sample APIs that will support MPS functions. The NPP dynamic sandbox offered will also be updated to include these sample APIs, thereby enabling third parties to test these APIs in a sandbox environment.

Business services vs overlay services

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. This enables organisations to develop their core offerings and deliver services to their customers outside of the platform.

NPPA is focused on developing broad native capability and the establishment of different 'business services' with defined rules that can support a range of use cases and be used by third parties in a variety of ways. 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 contained in the NPP roadmap will meet the needs of many third parties, including fintechs, businesses, corporates, service providers and government.

Utilising the platform's native capabilities requires a commercial relationship with only **one** NPP participating financial institution as payment messages sent via one financial institution can reach all of the 67+ million available accounts on the NPP.

¹⁰ See https://nppa.com.au/wp-content/uploads/2019/11/NPP-API-Framework-v3.0_28-Nov-2019-1.pdf

¹¹ To access the new NPP API Sandbox, visit <https://nppa-developer.swift.com/user/register>



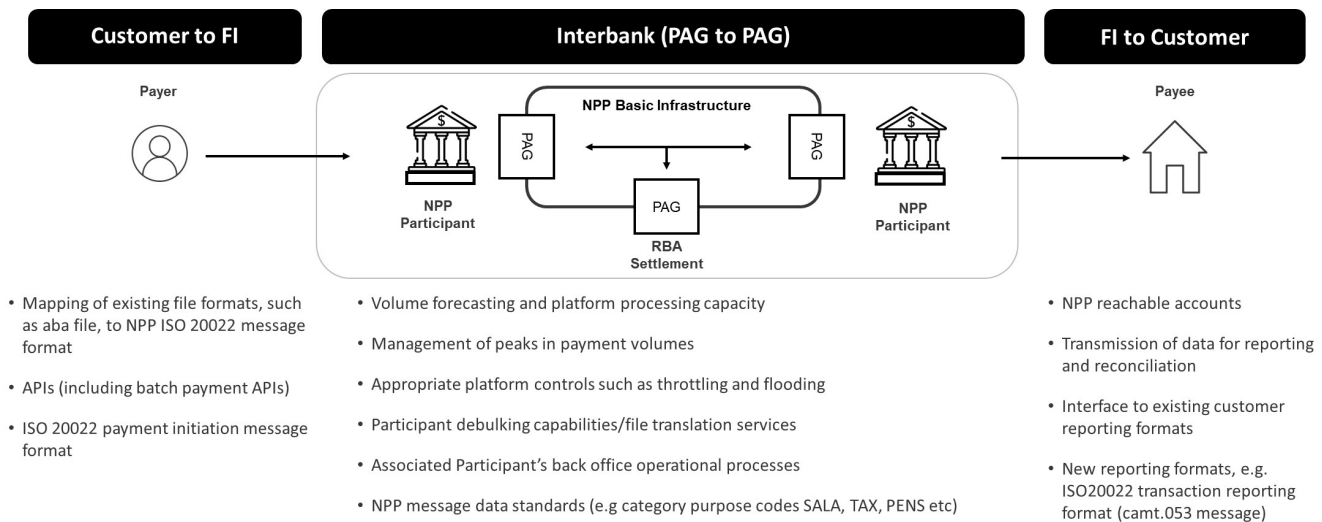
NPP Participant capability development

In addition to capability being centrally developed by NPPA, individual participating financial institutions continue to develop and extend NPP capabilities to their customers according to their respective business priorities and timings. Given the distributed nature of the NPP architecture, the availability of NPP capability is driven by what the individual end points have deployed. Organisations who are interested in understanding how they can best utilise the platform’s capabilities should consult with their financial institution or payments provider to understand what NPP services they are offering and their plans for future capability development.

Migration of payments from the current Direct Entry system

In contrast to account to account payments made using the Direct Entry system (which are settled in batches, several times during the day or the next business day), payments made by the NPP move value in real-time between bank accounts, are available 24/7/365 and can carry more data.

Most NPP participating financial institutions are actively migrating some of their direct credit payments to the NPP - primarily ‘pay anyone’ payments - and this is expected to continue with other Direct Entry payments moving to the NPP over time, with a view to closing down the Direct Entry system at some point in the future.¹² To support this effort, NPPA is focused on ensuring the underlying capabilities are in place to support the migration of these payments to the NPP in a safe, secure and standardised manner:



This programme of work includes continuing to expand on NPP account reach, operational readiness and platform performance, the development of common NPP message formats and mapping from existing Direct Entry file formats, a consistent approach to APIs and operational processes.

A number of existing Direct Entry payments which use the 18 characters available can be migrated directly over to the NPP in their current form. Consistency in how payments are moved across to another payment system will be critical in terms of mapping from existing file formats to new message types, carriage of data, etc. NPPA has developed mapping guidance and the development of common NPP ISO 20022 message formats in order to support this and ensure consistency and standardisation in how this is conducted.

¹² See, for example, <https://www.auspaynet.com.au/insights/consultations/future-state>



NPPA will continue to progress this programme of work and will seek feedback from the market to understand where further assistance or activity is required in order to support the migration of specific payments over to the NPP.

NPPA will provide a further update on the NPP roadmap in October 2020.

About New Payments Platform Australia (NPPA)

Utility payments infrastructure

Operating as non-profit maximising utility payments infrastructure, the NPP is owned by 13 shareholders¹³ (both large and small financial institutions and including the Reserve Bank of Australia) for and on behalf of the Australian payments industry. NPPA is a public company established to oversee the development and operation of the NPP.

Open access philosophy

NPP's access framework has a range of access methods, balancing broad participation while maintaining safeguards needed for a real-time payment system, and ensuring the ongoing protection of consumers. A number of specialist wholesale payment service providers, banks, and non-bank fintechs provide access to third parties. Availability of APIs is increasing which will also support NPP access.

Operates on a cost recovery basis

NPPA operates on the guiding principle of being economically self-sustaining aiming to recover its operating costs with wholesale unit transaction costs levied on NPPA's shareholders. The same unit transaction cost is applied to all shareholders equally regardless of volume. As volumes increase on the platform, the wholesale unit transaction cost will decrease.

NPPA governance

The NPPA Board has 11 voting Directors including three independent Directors and the RBA. Each Director has one vote – and collectively the Directors appointed by the four major banks have only one-third of the votes. Decisions regarding access, pricing and other governance related matters are determined by the independent Directors and NPPA Management.

¹³ 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.

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

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