

NPP Functionality and Access Consultation: Conclusions Paper

June 2019

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1. Introduction

1.1 Background

The New Payments Platform (NPP), launched in February 2018, is a fast retail payments system developed by a consortium of 13 financial institutions, including the Reserve Bank. The NPP provides the clearing and settlement infrastructure through which financial institutions can provide their household, business and government customers with the ability to make fast, versatile and data-rich payments on a 24/7 basis. Utilising the Fast Settlement Service (FSS) provided by the Reserve Bank, payments through the NPP are settled between financial institutions in real-time, which enables financial institutions to provide immediate funds availability to payment recipients.

This report presents the conclusions from a public consultation on NPP access and functionality that the Reserve Bank has undertaken with input and assistance from the Australian Competition and Consumer Commission (ACCC). The consultation was undertaken for three main reasons. First, the Reserve Bank had committed to reviewing the operation of the NPP sometime after its launch. The 2017 Annual Report of the Payments System Board noted that ‘at some point after the NPP is operational, it will be appropriate for the Payments System Board to assess how well the strategic objectives [that prompted the development of the NPP] have been met’.¹

Second, the Productivity Commission’s 2018 report into competition in the Australian financial system raised some concerns and made recommendations about the NPP.² For example, the Commission expressed concerns that the role of the incumbent financial institutions in the governance structure of NPPA could give rise to conflicts of interest that may impede access for new entrants and undermine competition. Among other things, the report recommended that:

- the Payments System Board should impose an access regime on the NPP, to ensure widespread access of both financial system providers and consumers
- the ACCC and the Payments System Board should investigate different ways to improve the functionality of the NPP to promote competition.

Finally, the Reserve Bank and the ACCC were aware that some entities had expressed concerns (some of which were covered in the Productivity Commission’s report) that the services offered through the NPP, or the ways of accessing the NPP, did not meet their needs. For example, some businesses had expressed a desire to undertake ‘pull payments’, such as direct debits, a service that is not yet available through the NPP. In other cases, entities had argued that the requirements to become a direct participant in the NPP were unnecessarily burdensome.

1 Payments System Board (2017), ‘[Annual Report](#)’, August, p. 40.

2 Productivity Commission (2018), ‘Competition in the Australian Financial System’, Inquiry Report No. 89, June, available at <<https://www.pc.gov.au/inquiries/completed/financial-system/report>>.

1.2 The Role of the Reserve Bank

The Reserve Bank is the principal regulator of the Australian payments system. Under the *Reserve Bank Act 1959*, the Payments System Board is responsible for determining the Bank's payments system policy. The Board is required to do this in a way that will best contribute to controlling risk in the financial system; promoting the efficiency of the payments system; and promoting competition in the market for payment services. The Bank has a number of powers to pursue these goals, including the ability to 'designate' a payment system as being subject to its regulation and then to impose standards and/or an access regime on that system or on participants in that system if warranted on public interest grounds. The Bank's Payments Policy Department advises the Payments System Board in the discharge of these responsibilities.

Aside from its interest in the NPP from a policy perspective, the Reserve Bank was involved in the development of the NPP and plays a number of roles in the ongoing operation and governance of the NPP:

- The Bank is one of the 13 financial institutions that funded the development of the NPP and is a shareholder of NPP Australia Limited (NPPA), a public company that owns and operates the NPP.
- The Bank is a direct participant in the NPP in its capacity as a transactional banker to the Australian Government and its Departments and agencies. The Bank provides NPP services to its government clients, including the ability to make real-time payments and collect public monies via NPP payments to government accounts. These services are provided by the Reserve Bank's Banking Department. The Bank does not offer any banking or related services, including NPP-related services, to the public or non-government commercial entities.
- The Bank built and operates the FSS, which provides real-time settlement of NPP transactions between financial institutions on a 24/7 basis. The Bank's Payments Settlements Department has responsibility for this function. Settlement services are provided to NPP participants under a contractual arrangement with the Bank.
- In recognition of the importance of the FSS to the operation of the NPP, the NPPA Shareholders' Agreement gives the Bank the right to appoint a director to the Board of NPPA. The Bank has exercised this right and appointed the Head of its Payments Settlements Department as a director of NPPA.

Given the duties of the Bank as regulator of the payments system and its involvement in the NPP from an operational perspective, the Payments System Board has approved internal governance arrangements for the Bank's involvement with the NPP to ensure consistency with the Board's policy objectives and to manage any potential conflicts of interest. These arrangements, which cover issues such as information sharing and the role of the RBA-appointed director of NPPA, are set out in a Memorandum of Understanding (MOU) between the Bank and NPPA.³

The consultation on NPP access and functionality was conducted by the Bank's Payments Policy Department under the auspices of the Payments System Board. It was conducted independently of those parts of the Bank that are involved in the operation of the NPP and in a manner that is consistent with the arrangements set out in the Bank/NPPA MOU.

3 See: <https://www.rba.gov.au/payments-and-infrastructure/payments-system-regulation/npp-mou.html>

1.3 The Role of the ACCC

The ACCC is an independent statutory authority that administers the *Competition and Consumer Act 2010* and other Acts. It works to promote effective competition and fair trading in the market place to benefit consumers, business and the community, and efficiency in the delivery of certain infrastructure services.

As the competition regulator, the ACCC has expertise with competition issues including the exercise of market power, problems caused by market structures, and developing regulatory solutions. In the ACCC's experience, competitive pressure in a market generally promotes lower prices, increased efficiencies and innovation, and better quality services. The ACCC has publicly and strongly advocated the need for competitive market structures and appropriate regulatory frameworks, relating specifically to access and pricing, to be in place for infrastructure with monopoly characteristics, such as the NPP. Several areas of the ACCC deal with issues relating to financial services, including its recently formed Financial Services Competition Branch. Its Infrastructure Regulation Division and Adjudication Branch also regularly deal with issues relating to financial services.

In this consultation, the ACCC provided input and assistance to the Bank on access issues, and participated in consultation meetings with stakeholders. The ACCC supports the conclusions reached by the Bank in this report and notes the vital importance of monitoring and future review of the issues raised by industry. The ACCC agrees that issues raised in this consultation need to be addressed and considers that these issues are likely to be addressed through the changes recommended by this report. Accordingly, the ACCC agrees with the report's conclusion not to recommend the imposition of an access regime on the NPP at this time.

However, the ACCC considers it is important that the report's recommendations are implemented as per the dates specified in this report, or earlier if practicable. It supports the recommendation for NPPA to respond to the report with its plans for action, and the Reserve Bank's commitment to monitor progress towards implementation.

The ACCC also considers that reviewing the effectiveness of these recommendations in addressing stated issues is essential, and that regulation and an access regime should remain an option if stated issues remain. The ACCC therefore supports the view that the Bank (with the ACCC's involvement) will commence a further review of access and functionality issues (and the need for regulation) by end July 2021.

In April 2017, the ACCC authorised several of the provisions of the NPP rules relating to the rights of NPPA to suspend and terminate NPP membership, membership eligibility criteria and the obligation to settle payments via the Reserve Bank's Fast Settlement Service.⁴ These provisions may have otherwise breached certain of the competition provisions under the *Competition and Consumer Act 2010*, because they involve agreements between businesses which may be considered to be competitors. The ACCC can grant authorisation if it is satisfied that the likely public benefits outweigh the likely public detriments. If certain of the authorised provisions require amendment as a result of

4 See: ACCC (2017), 'Determination – Applications for authorisation lodged by NPP Australia Limited in respect of certain provisions of the New Payments Platform Regulations', 5 April, available at: <https://www.accc.gov.au/system/files/public-registers/documents/D17%2B43242.pdf>. The suspension and termination provisions were authorised for a period of five years, while the provisions on eligibility requirements and settlement obligations were authorised for perpetuity.

changes made in response to this document, NPPA may need to seek a variation to the authorisation from the ACCC.

1.4 The Consultation Process

The Reserve Bank published a consultation document in October 2018 that provided the background and motivation for the consultation and invited feedback from stakeholders on issues relating to the functionality and access arrangements for the NPP.⁵ In particular, the consultation invited views on whether the various ways of accessing the NPP, and their associated technical and other eligibility requirements, are adequate for different business models, or whether other forms of access or eligibility requirements may be justified. In total, the Bank received 19 written submissions to the consultation from a range of stakeholders including payments companies, banks, technology and financial industry bodies, fintechs, consultants, an academic and some members of the public.⁶ NPPA provided a written submission. Between February and March, the Reserve Bank and the ACCC held 17 meetings with stakeholders in Melbourne and Sydney, including with most of those who provided written submissions. The Bank and the ACCC also consulted with the Australian Securities and Investments Commission (ASIC) and the Australian Prudential Regulation Authority (APRA).

1.5 Recommendations

This report makes a number of recommendations, which are listed below for convenience. The Bank believes that if these recommendations are fully implemented by NPPA and its participants, this should address the issues and policy concerns covered in this report. The Bank will, with the assistance of the ACCC, conduct another review commencing no later than July 2021. This review could take place earlier if the Bank becomes aware of significant issues or concerns regarding NPP access or functionality. If the Bank assesses that there has been insufficient progress in addressing the recommendations made in this report, it will closely consider the case for regulation via standards mandating functionality or an access regime imposed on the NPP and its participants.

Functionality and Overlay Services

- NPP participants should prioritise the roll-out of NPP services to their entire customer base and address any functionality gaps that currently exist in their customer offerings.
- Starting no later than end September 2019, NPPA should periodically publish a roadmap of the additional NPP functionality it has agreed to develop and the expected time period over which it will be delivered. The roadmap should be updated at least semi-annually.
- By end December 2019, NPPA should introduce a power for its Board to mandate that specified NPP core capabilities must be supported by NPP participants within a specific period of time, with an enforceable sanctions regime (including possible financial penalties) to apply if participants do not comply.
- By end September 2019, NPPA should publish its process for assessing potential overlay services, including how confidential information on the plans of potential overlay service providers will be controlled and the respective roles and responsibilities of the NPPA management, independent directors and the broader NPPA Board in approving overlay services.

5 See RBA (2018), '[New Payments Platform Functionality and Access: Consultation](#)', October 2018.

6 Non-confidential submissions are available here: <https://www.rba.gov.au/payments-and-infrastructure/new-payments-platform/submissions/>

Access to the NPP

The ADI Requirement for Participants

- Direct access to the NPP should be open to a range of payments services providers. NPPA should assess and report on options for amending the NPP Regulations, and other arrangements, to allow for an entity that is not an ADI to potentially become an NPP Participant. The participation of non-ADIs would be subject to requirements appropriately tailored and calibrated to the key risk and operational considerations essential for participation in the NPP. NPPA should:
 - by end October 2019, submit to the Bank and the ACCC an assessment of options for revised participation requirements for non-ADI participants
 - by end March 2020, implement any revised participation requirements for non-ADI participants.

The Shareholding Requirement for Participants

- By end December 2019, NPPA should introduce more gradation into the shareholding requirement by creating at least one additional lower band, so that subscription requirements can be more closely tied to an entity's size or expected contribution to NPP transaction volumes.
- By end December 2019, NPPA should establish an access route for direct participation that is based either on acquiring shares in instalments or on periodic subscription or membership fees, rather than the upfront purchase of shares.
- By end December 2019, NPPA should consider allowing NPP participant applicants that did not exist when the NPPA was being developed to subscribe to a lower amount of shares than usual.

NPPA Governance

- NPPA should appoint a third independent director by end September 2019.
- By end December 2019, NPPA should review its arrangements for applications for access as a participant, connected institution or overlay service provider. Where an application has been rejected by the NPPA Board, or by NPPA management during its initial assessment, the applicant should be able to ask for a review of the decision by an Evaluation Panel. The Evaluation Panel should be comprised of three independent directors and two independent external experts appointed by the three independent directors. The Panel should have the binding power to overturn the earlier denial of an application if it decides that the applicant has met all of the eligibility requirements and also the power to ask NPPA to review the access criteria if it believes the criteria impose unreasonable conditions.
- At least once a year, NPPA should publish a report of the number of applications for access that it received during the preceding year, the outcomes of those applications, and a summary of the key reasons in cases where applications were ultimately not supported by the NPPA Board. The first report should cover the financial year ending June 2019.
- NPPA should notify the Reserve Bank's Payments Policy Department within one week whenever an application for access to the NPP (as a participant or connected institution) is not supported by NPPA's Board.

NPP Transaction Fees

- From its first pricing review after July 2019, NPPA should publish data on its wholesale transaction pricing. Prior to the introduction of full cost-recovery pricing, NPPA should publish the wholesale transaction fee that would be implied by full cost-recovery pricing. Following the introduction of full cost-recovery pricing, it should publish its wholesale transaction fee and the methodology it has used to determine that fee.

2. The Development and Initial Operations of the NPP

The NPP is a fast retail payments system, developed over more than five years from inception to launch. It was developed to address a number of gaps in Australia's retail payments system that the Reserve Bank had identified in the conclusions to its 2010–2012 *Strategic Review of Innovation in the Payments System*. The development of the NPP was a major, and costly, project for the industry that involved significant cooperation between the 13 initial participating financial institutions, including the Reserve Bank. In addition to building the NPP itself, the participant banks had to develop and upgrade their internal systems to support the platform, including to allow posting to customer accounts in real time, and the Reserve Bank had to build a new real-time settlement system for retail payments. Since its public launch in February 2018, payment volumes through the NPP have been growing steadily as participants have progressively rolled out fast payment services to their customers, though the speed at which some banks have enabled NPP services for their customers has been somewhat slower than was initially expected.

2.1 Development of the NPP⁷

In 2010 the Payments System Board initiated the *Strategic Review of Innovation in the Payments System*. This was motivated by growing evidence that the payment services provided to end-users in Australia were falling behind the services available to end-users in many other countries. The objective of the Review was to identify areas in which innovation in the Australian payments system could be improved through more effective cooperation between stakeholders and regulators.

From 2010 to 2012, the Reserve Bank consulted with the payments industry and other key stakeholders and assessed the degree of payment system innovation in Australia and overseas. The Bank found that collaborative innovation, where institutions work together to improve the underlying payments system infrastructure, had proved difficult in Australia. The Bank also found that this difficulty was affecting the ability of financial institutions to innovate and provide new and better payments services to their customers. Accordingly, the Bank concluded that there were market failures preventing, or significantly delaying, certain types of cooperative innovation that would be in the public interest.

In the conclusions to the Review, published in mid-2012, the Bank identified a number of specific gaps in the payments system that it anticipated would become increasingly problematic in the years to come.⁸ To help overcome industry coordination failures, the Bank decided to set strategic objectives for the payments system and encourage the industry to find the best ways to meet them. Reflecting

7 The material in this section draws on Richards T (2018), '[An update on Australia's New Payments Platform](#)', Speech to the Chicago Payments Symposium, 3 October and Richards T (2014), '[The Path to Innovation in Payments Infrastructure in Australia](#)', Speech to the Chicago Payments Symposium, 26 September.

8 See RBA (2012), '[Strategic Review of Innovation in the Payments System: Conclusions](#)', June.

the functionality gaps identified in the Review, the Bank initially set a number of strategic objectives that were likely to require the industry to build a new payment system. These objectives were to provide end-users of the payments system with:

- the ability to make real-time retail (or low-value) payments – that is, payments where the recipient has visibility and use of the funds in seconds rather than hours or days
- the ability to make and receive retail payments outside of normal banking hours – ideally on a 24/7 basis
- the ability to send more complete remittance information with payments than is available in the 18 characters that can be transmitted with a Direct Entry payment – ideally using the more flexible and modern ISO 20022 international messaging standard
- the ability to address payments in a relatively simple way, such as to an email address or a phone number – rather than using Bank-State-Branch (BSB) and account numbers which require the sender to correctly enter up to 15 digits.

The Australian Payments Network, the payments industry association, coordinated the industry's response to the conclusions from the Review.⁹ A Real-Time Payments Committee composed of industry representatives was established to prepare a detailed proposal for a new payments infrastructure, later named the New Payments Platform, which could meet the strategic objectives that had been set by the Bank. This proposal was presented to, and subsequently endorsed by, the Payments System Board in February 2013, eight months after the release of the conclusions paper from the Review. Following this, the industry established a Steering Committee to take the project forward and invited the Reserve Bank to contribute two representatives, one representing its policy function and one from its settlements infrastructure area.

The industry contracted KPMG to manage the project and, during the next year and a half, worked on project planning, the development of business requirements and the tenders for service providers. Financial institutions were then invited to subscribe as shareholders of NPP Australia Limited (NPPA), a new company established to operate the NPP as a mutually-owned utility infrastructure. In December 2014, a consortium of 13 institutions, including the Reserve Bank, agreed to fund the build and operation of the infrastructure to support the NPP and became NPPA's founding shareholders. SWIFT was soon after contracted by NPPA to build the NPP's Basic Infrastructure and BPAY was selected to build the platform's first overlay service (see below).

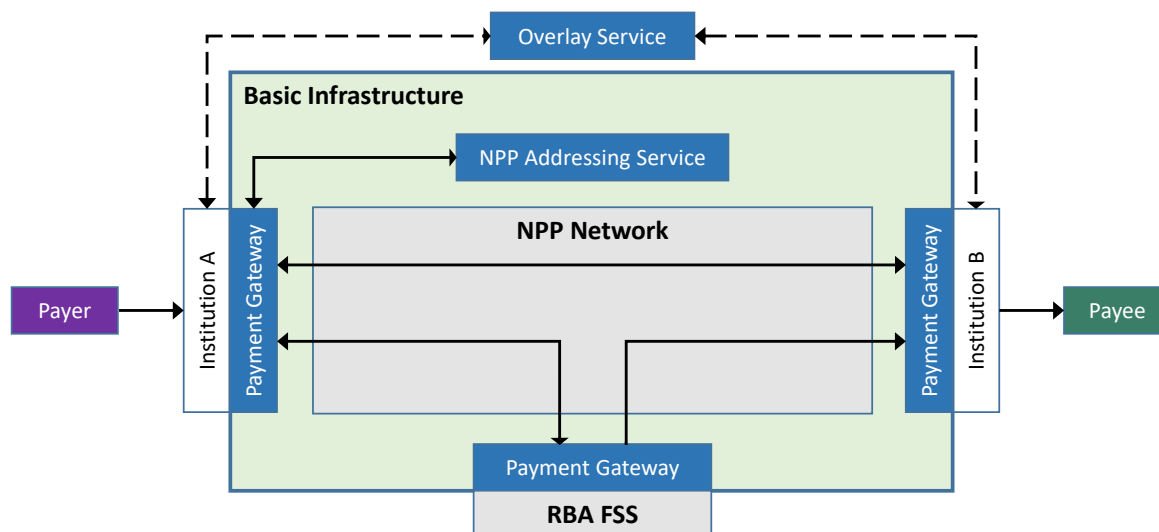
Parallel with the industry's work to build the NPP, the Reserve Bank worked to build the Fast Settlement Service (FSS), which would enable the settlement of individual NPP transactions in real time across Exchange Settlement Accounts (ESAs) that financial institutions hold at the Bank. In addition to building the settlement infrastructure, the Bank had to upgrade its processes and physical infrastructure to support the 24/7 operations required for the NPP. Since transactions are settled in the FSS overnight and on weekends, when the interbank cash market is closed, the Bank also worked with NPP participants to put in place suitable liquidity mechanisms to support the smooth operation of the NPP.

⁹ The Australian Payments Network was at the time known as the Australian Payments Clearing Association (APCA).

2.2 NPP Architecture¹⁰

The NPP is a distributed system that has two main components: the NPP ‘Basic Infrastructure’ and the Reserve Bank’s FSS (Figure 1).

Figure 1: NPP Infrastructure and Payment Processing



Source: RBA

The NPP Basic Infrastructure (BI) is an industry utility owned by NPPA and operated by SWIFT under a long-term contract with NPPA. It includes a new domestic SWIFT messaging network connecting participants to each other and to the FSS. Participants connect via payment gateways, which route ISO 20022-format messages between themselves and the FSS.¹¹ Notably, the BI is a distributed network with no central message switch, which enhances the resilience of the system. The payment gateways are located within each participant’s data centres and each participant is responsible for their safe and reliable operation.

The BI also includes an Addressing Service, which is a centralised database where participants can register a customer’s transaction account and link it to an identifier or ‘alias’ called a PayID, which may be a phone number, email address or Australian Business Number. Instead of having to key in a BSB and account number, payers are able to direct their payments to the more easily remembered PayID of the payee that has been registered in the Addressing Service. The platform provides confirmation of the payee’s legal account name to the payer prior to the payment being authorised, to further reduce the risk of misdirected payments.

The FSS is a separate service of RITS, which is the Reserve Bank’s existing real-time gross settlement (RTGS) system for large-value payments. The FSS facilitates the real-time, irrevocable and unconditional settlement of each NPP payment across the ESAs of the relevant NPP participants. There is no netting or batching and payments are settled line-by-line in real time. As a result, payee

¹⁰ A more detailed description of the structure of the NPP can be found in Rush A and R Louw (2018), ‘[The New Payments Platform and Fast Settlement Service](#)’, RBA Bulletin, September.

¹¹ ISO 20022 is a global and open standard for payment messaging that supports a range of message types and a large amount of both structured and unstructured data.

financial institutions can make funds available to the recipient customer immediately, without incurring settlement or credit risk.

‘Overlay services’ are another important aspect of the NPP structure. These will be commercial payment services that leverage the BI and the ability to make real-time, data-rich and easily addressed payments. They may be simple rule-books that set standards for how participants handle certain payments (e.g. speed of posting, what data travels with the payment and what the end-user customer experience is), or they may be more complex payment solutions that involve new message types and interactions with external entities or databases. The first overlay service that launched alongside the NPP was developed by BPAY and is branded as Osko. This is a basic person-to-person credit transfer (‘push payment’) service with the ability to include up to 280 characters of data that participants make available to their customers via their existing internet and/or mobile banking channels.¹² The Osko service includes specific rules relating to the end-user experience, including obligations on how quickly funds must be posted to the payee’s account and informing users of the status of the payment.

The layered architecture of the NPP was designed to promote competition and innovation in the development of overlay services without the need to make frequent or significant technical changes to the BI. NPP participants can choose to subscribe to particular overlay services according to the needs of their customers or other commercial interests. While the Osko service was developed so that there would be a compelling reason to use the NPP when it launched, the expectation was that additional overlay services would be developed over time that may be tailored to particular payment use cases or customer needs. In fact, when the NPP was being developed, there was agreement between participants that BPAY would eventually extend the capabilities of Osko. The intention was to provide ‘request-to-pay’ functionality and the ability to send a document (such as a PDF) with a payment, services that are likely to be particularly useful for businesses.¹³ However, as discussed further below, these services are yet to be delivered and no other overlay services have been developed as yet.

2.3 Access to the NPP

Most end-users of payment services, such as households, businesses and government entities, will access NPP functionality (i.e. the ability to send and receive payments) through services provided on a commercial basis by the financial institutions where they maintain their accounts. The NPP was specifically designed to be ‘open access’ and support participation from a range of businesses across the payments ecosystem wanting to offer NPP services to their customers. NPPA’s constitution states that an objective of NPPA is to ‘operate the NPP in a manner that promotes the public interest’, including by ‘facilitating fair access to the NPP as mutually owned utility infrastructure’ and ‘ensuring ongoing investment in the NPP to meet the changing needs of financial institutions and users of the Australian payments system.’

¹² BPAY was selected in 2014 to develop the first overlay service for the NPP as a result of a competitive tender process that was managed by the NPP project manager, KPMG.

¹³ In this context, ‘request-to-pay’ functionality refers to the ability of an entity to send a payment request to a payer through the NPP, which the payer could then choose to accept to automatically execute a credit transfer from their account to the payee’s account. This functionality would be similar to the current direct debit functionality, except that the payer would need to approve each payment request. This service may be particularly useful for a business wanting to use the NPP to send a notification to its customers of a pending invoice with a request to pay and provide a convenient way for the customer to pay through the NPP.

There are a number of ways that entities can access the central infrastructure, which cater for different business models and objectives. NPPA has established graduated and risk-based eligibility criteria that apply to each access method, which aim to balance the desire to encourage participation against the need to maintain the safety and security of the real-time payments infrastructure.¹⁴ There are four ways that businesses can connect to the NPP:

- **Direct participants** connect to the NPP directly using their own NPP payment gateway. They are required to be licensed as an authorised deposit-taking institution (ADI) or restricted ADI (RADI) by APRA and meet any associated prudential and operational standards imposed by APRA. They must hold an ESA at the Reserve Bank and become a shareholder (and subscribe to shares) in NPPA. They must also meet various technical requirements set by NPPA for establishing and operating an NPP payment gateway. The decision to admit a new participant is ultimately a decision of the NPPA Board, but the Board has provided delegations to NPPA management for a large part of the assessment of new applications. In addition to being able to clear and settle payments through the NPP, direct participants can offer indirect connectivity to the NPP for other entities. Currently, there are nine direct participants – the four major banks, Macquarie Bank, the Reserve Bank (via its Banking Department) and three ‘aggregators’ (Cuscal, ASL and Indue) that provide connectivity for a range of indirect participants and identified institutions.¹⁵
- **Indirect participants** connect to the NPP using a direct participant’s NPP payment gateway, but otherwise have the same capabilities as direct participants. Indirect participants are also required to be an ADI (or RADI), hold an ESA at the Reserve Bank, and become shareholders in NPPA. This type of access may suit, for example, a smaller bank that does not need or want to operate its own payment gateway. There are currently two indirect participants, Bendigo and Adelaide Bank and ING Australia.
- **Identified institutions** connect to the NPP indirectly via a direct participant’s NPP payment gateway. Identified institutions are able to offer their customers NPP payment services, with the payments cleared and settled on behalf of the identified institution by the sponsoring direct participant (which may, for example, be a specialist ‘aggregator’). A commercial arrangement is required between the sponsoring NPP participant and the identified institution, but NPPA does not have any role in connecting identified institutions. Identified institutions are not required to be an ADI (or RADI), be a shareholder in NPPA, or hold an ESA at the Reserve Bank (they rely on the sponsoring participant’s ESA for settlement). In practice, almost all identified institutions to date have been ADIs – as of May 2019, 68 smaller banks, credit unions and building societies have obtained connections to the NPP as identified institutions. One non-ADI entity providing payment services, Assembly Payments, has also been connected in this way.

¹⁴ The process for connecting to the NPP and associated eligibility requirements are provided in the NPP Regulations available on NPPA’s website at: <https://www.nppa.com.au/the-company/governance/>

¹⁵ Aggregators specialise in providing wholesale payment services to other institutions (i.e. they have no end retail customers of their own). Their business model is to provide access to different payment clearing streams for smaller entities; some of them also provide payment products and services such as ATM access, card scheme sponsorship and fraud prevention and management. Aggregators help to promote competition in the payments industry by providing the technology, licensing and operational capabilities that might otherwise be too expensive for smaller entities to establish on their own.

- **Connected institutions** will connect to the NPP using their own payment gateway and are able to send payment initiation and other non-value messages through the NPP.¹⁶ Because they are not involved in the clearing and settlement of payments, they are not required to be an ADI (or RADl) or hold an ESA at the Reserve Bank, but they need to be financially solvent and comply with the same technical requirements for operating a payment gateway as for direct participants. This type of access may suit entities that are not ADIs but would benefit from operating their own payment gateways to submit a high volume of payment initiation messages directly into the NPP rather than via their financial institution’s normal customer channels; such an arrangement might suit payroll processors, share registries, retailers or other large corporates. So far there are no connected institutions but NPPA has indicated that it is in discussions with a number of interested parties.

Table 1: NPP Access Eligibility Criteria

	Direct Participant	Indirect Participant	Identified Institution	Connected Institution
Shareholder of NPPA	✓	✓	✗	✗
Licensed by APRA as an ADI (or RADl)	✓	✓	✗	✗
Hold an ESA at the Reserve Bank	✓	✓	✗	✗
Connect via own payment gateway	✓	✗	✗	✓
Connect via third-party payment gateway	✗	✓	✓	✗

Source: NPPA

Entities can also apply to NPPA to become an overlay service provider. Any organisation can apply as long as it can demonstrate a sound business plan backed by the required expertise to deliver their proposed product or service. Overlay service providers will offer their product or service to NPP participants and identified institutions on a commercial basis to make available to their customers.

2.4 NPP Roll-out and Initial Operations

The NPP was launched for public use on 13 February 2018 after becoming operational for industry ‘live proving’ in November 2017. Initially, 61 institutions were connected as participants or identified institutions, with this number having since increased to 80 institutions (Table 2). Notably, this includes 68 smaller financial institutions and one non-bank payment provider that access the NPP through the services of an aggregator or other sponsoring participant (as identified institutions), without the need to directly connect to the NPP’s BI and operate their own payment gateways.

¹⁶ A payment initiation message is one that would be sent to an NPP Participant seeking the initiation of a payment from a specified account, with the payer’s authorisation. They could be used, for example, by a Connected Institution to instruct a payment from its own account or from the account of a third party, such as a customer. The clearing and settlement of that payment would then be effected by separate ‘value’ messages exchanged between NPP Participants and the FSS. Other non-value messages would include those used to look up a PayID in the Addressing Service or to request the status of a payment.

Table 2: Number of Active NPP Participants and Identified Institutions

Date	Participants*	Identified Institutions	Total
February 2018	10	51	61
August 2018	10	62	72
February 2019	11	66	77
May 2019	11	69	80

* Of the 13 participants that funded the development of the NPP, 2 are yet to connect
Source: NPPA

As would be expected with any new payment system, financial institutions have taken a staged approach to their roll-out of end-user NPP services, gradually introducing different functionality, channels and customer segments. For example, several of the major banks prioritised retail customers over business customers and some banks have prioritised mobile banking access over internet banking access. Some banks also launched their service with restricted functionality, such as the ability to only make payments to registered PayIDs (as opposed to also to BSBs and account numbers), or with relatively low payment value limits. The different approaches banks have taken to roll out their services may have been partly aimed at managing risk and allowing them to fine-tune their systems and processes. In other cases, however, the slow roll-out reflected an insufficient level of systems work or internal preparation in the lead-up to launch. In particular, some of the major banks appear to have underestimated the complexity of integrating the NPP with their own systems and the investment required to upgrade their core capabilities. As a result, while the NPP roll-out was always intended to be gradual, it has been slower and more uneven than was initially expected.

This has contributed to delays in the development of planned overlay services extending NPP functionality to include the ability to send a document with a payment and the ability to make and receive payment requests. These extensions to BPAY's Osko service were initially expected to be operational shortly after the NPP's launch but there is still no decision on launch and it is unlikely that they could be available before about late 2020.

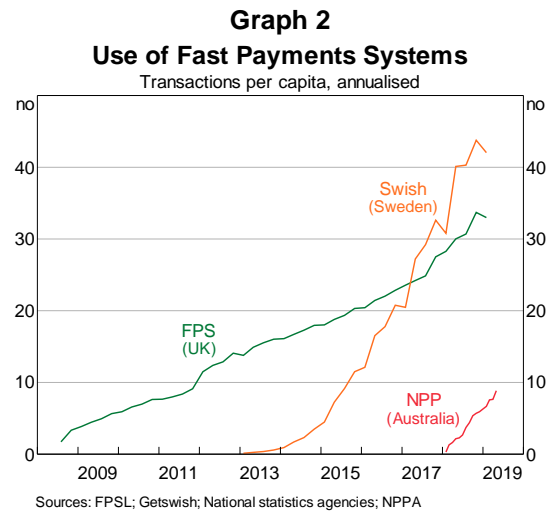
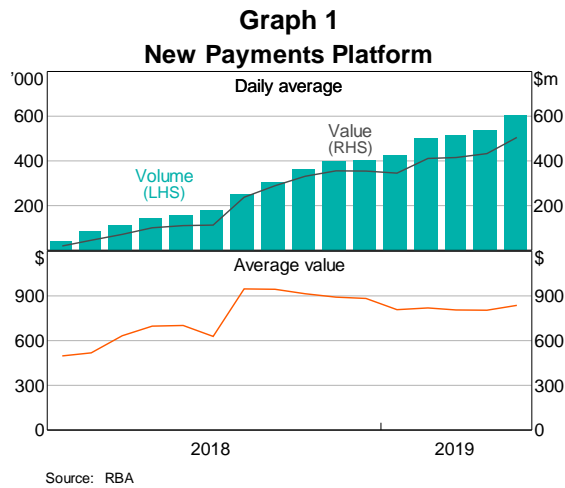
The Reserve Bank has expressed its disappointment with the slow roll-out of NPP services and functionality on a number of occasions. For example, in November 2018, the Governor noted that:

It was originally anticipated that these two overlay services [request to pay and pay with document] would be up and running not long after the NPP launch. Unfortunately, this timeline has slipped. A number of the major banks have also been slower than was originally expected to roll out NPP functionality to their entire customer bases. This is in contrast to the capability offered by smaller financial institutions, which from Day 1 were able to provide their customers with NPP services. Given the slow pace of roll-out by the banks, and the prospect of delays for additional overlay services, I recently wrote to the major banks on behalf of the Payments System Board seeking updated timelines and a commitment that these timelines will be satisfied. It is important that these commitments are met.¹⁷

Notwithstanding the slow roll-out, the number of end-users with access to fast payments and the number and value of transactions through the platform have been growing steadily. As of end April, there were more than 55 million Australian bank accounts accessible via the NPP (estimated at about 85 per cent of all accounts that will eventually be reachable) and around 2.8 million PayIDs had been

17 Lowe P (2018), '[A Journey Towards a Near Cashless Payments System](#)', Speech at the 2018 Australian Payment Summit, November.

registered. The platform is now processing an average of around 600,000 payments worth \$500 million each day, with an average transaction value of around \$800 (Graph 1).¹⁸ While these transaction amounts are still very low compared with other retail payment systems in Australia, the adoption of the NPP is proceeding at least as quickly as occurred for some comparable fast-payment systems that were launched in other countries (Graph 2).



18 Data on NPP transactions are contained in [RBA Statistical Tables](#) C6 and C6.1.

3. Functionality and Overlay Services

As noted earlier, with the exception of corporate entities connecting as either identified or connected institutions, end-users (including households, businesses and government entities) access NPP functionality through the services offered by their financial institutions. These services are provided on a commercial basis and there are no requirements on what NPP services financial institutions must provide. As with any banking product, however, one would expect there to be competitive pressure on financial institutions to provide the services that are valued by their customers.

At this point, Osko is the only overlay service available on the NPP – it provides basic account-to-account fast payment functionality through the mobile and internet banking applications of NPP-connected institutions. However, as was noted earlier, BPAY is planning to expand Osko’s services to include the ability to send a document with a payment and the ability to make and receive payment requests. The design of the NPP envisaged that, over time, a range of other overlay services, developed by different parties, would utilise the NPP to offer payment solutions tailored to particular contexts and addressing a range of other customer needs. NPP participants will have the option of subscribing to these overlay services if they wish to provide them to their customers.

NPPA is also working to enhance the ‘native’ capabilities of the NPP by building additional services and capabilities as part of the core infrastructure. These capabilities, such as a planned ‘consent and mandate service’ (see Box A: The NPP’s Evolving Functionality), could provide functionality that might alternatively be provided by an overlay service. In other cases, the enhanced native capabilities could be used to improve the functionality of, or make it easier to develop, overlay services.

The consultation sought stakeholder views on the current functionality of the NPP, whether it was meeting their needs and what functionality gaps may exist. This chapter summarises the stakeholder feedback received in relation to NPP functionality and overlay services and provides an assessment and a number of recommendations.

3.1 Issues and stakeholder views

In the written submissions and consultation meetings, there were a range of views on NPP functionality. Some stakeholders (mainly NPPA and NPP participants) highlighted the capabilities the NPP already offers or that are being developed. Other stakeholders (mainly corporates, payment service providers and fintechs) were critical of the current functionality and the services offered by NPP participants to their customers.

Some stakeholders expressed disappointment that they did not have access to fast payments functionality because their financial institutions had not yet rolled out these services to all customers. In particular, as some participants prioritised the roll-out of their NPP services to retail customers, many business and corporate customers had faced, and in some cases were continuing to face, delays in having NPP functionality enabled for their accounts.

One submission suggested that the slow roll-out of NPP services may have exacerbated some of the concerns relating to access to the platform (discussed in Chapter 4). For example, entities that were

not receiving the NPP services they wanted from their financial institution may have felt compelled to connect to the NPP themselves, but then encountered the various eligibility requirements. Stakeholders suggested that the slow roll-out of NPP services was also undermining the positive network effects that come from broad account reach, resulting in disappointing user experiences with the platform and acting as a disincentive for entities to invest in developing overlay services.

Some submissions to the consultation also expressed disappointment about the current inability to make direct debits ('pull payments') through the NPP. This appeared to be a particular issue for businesses wanting to use the NPP to facilitate recurring payments from their customers. A number of stakeholders expressed doubts about the commitment of the NPP participants to deliver on the additional BPAY overlay services (payment-with-document and request-to-pay) despite these being seen as providing useful functionality, particularly for businesses and government.

The Productivity Commission, in its 2018 report on Competition in the Australian Financial System, also had concerns regarding functionality, which prompted it to recommend that the ACCC and the Payments System Board investigate different ways to improve the functionality of the NPP as a way to promote competition and innovation. The Commission argued that the initial 'push' payments offered by the NPP were a very limited use of its potential functionality, which should also include the ability to set up recurring and 'pull' payments. It also suggested investigating the feasibility of expanding the use of PayIDs to different payment types, including recurring payments, which it believed would make it easier for customers to switch bank accounts, thereby promoting competition.

A number of stakeholders, particularly fintechs, highlighted the need to facilitate greater use of application programming interfaces (APIs). In this context, APIs are software protocols published by a bank, which third-party systems can use to communicate in a standardised and secure way with that bank's systems to access NPP functionality.¹⁹ While NPPA has developed an API framework (see Box A), some stakeholders called on NPP participants to make APIs available as soon as possible for third parties to use to initiate, confirm and query NPP payments, rather than going through participants' regular internet or mobile banking channels.

Some stakeholders raised concerns about the challenges of deploying overlay services on the NPP, arguing that this could discourage innovation and constrain future functionality. One specific concern was that an overlay service would need to be supported by all or most NPP participants to be viable, and that it would be a costly and time consuming process for a prospective overlay service provider to bilaterally negotiate with each participant. In this context, it was suggested that BPAY had an advantage in implementing Osko because it is owned by the major banks, which are also the largest shareholders of NPPA. Another concern was that a prospective overlay service provider would have to expose its business plan and intellectual property to NPPA in the process of applying to be an overlay provider, and that this information could be accessed by their potential competitors on the Board of NPPA who are involved in assessing overlay services. It was suggested that concerns such as these have made some entities reluctant to engage directly with NPPA on establishing new overlay services. Suggestions put forward to address these concerns included having an NPPA Board committee of independent directors involved in assessing new overlay services and for NPPA to clarify how access to information on new overlay services would be controlled in order to deal with potential conflicts of interest.

¹⁹ Open APIs are also being developed in the context of Australia's open banking regime as a way for third parties to access customer data held in bank systems.

The Productivity Commission has also raised concerns about overlay service providers that are not NPP participants being at a competitive disadvantage relative to NPP participants that offer overlay services because of a lack of access to valuable transaction-level data. It recommended that all NPP participants that use an overlay service be required to share de-identified transaction-level data from that service with the overlay service provider. However, this issue of access to data on transactions going through overlay services was not raised by stakeholders during the Bank's consultation.

In its submission to the consultation, NPPA argued that the NPP currently has extensive capabilities that meet many organisations' business needs and use cases. The NPP presently offers real-time movement of funds on a 24/7 basis, extensive data capabilities, and simpler addressing via the PayID service. One stakeholder, which is also an NPP participant, argued that the NPP's current functionality meets all of the objectives that were identified by the Bank in its 2012 Strategic Review of Innovation. Moreover, NPPA and a number of NPP participants emphasised that a range of additional functionality is being developed or is planned to further extend the capabilities of the NPP (see Box A). They highlighted a central 'consent and mandate service', which will store payment authorisations by consumers and businesses and enable the platform to support recurring payments, providing an alternative to the current direct debit options provided by the Direct Entry system and supporting competition by making it easier to move payment authorisations from one financial institution to another.

Box A: The NPP's Evolving Functionality

As discussed earlier, the NPP was designed to operate as a distributed layered architecture. The Basic Infrastructure (BI) comprises a network of payment gateways, hosted by participants, as well as a central Addressing Service. By contrast, overlay services are products, services or schemes that use and extend the core capabilities of the BI in a customised way to provide value-added payment services or processes.

Over the past year, NPPA has identified a number of opportunities to take a coordinating role in providing additional functionality through the BI. By developing native NPP capability, such as defined payment message data elements, which could be used by participants or built upon and commercialised by an overlay service provider, NPPA intends to optimise the utility of the BI. This would enable participants and others to meet the needs of a range of end users without necessarily relying on a dedicated overlay service to do so.

NPPA has an ambitious agenda for extending the functionality of, and increasing transaction volumes through, the NPP. Some of its more noteworthy plans include:

- Extending its API framework
- Quick response (QR) code standards²⁰
- Consent and mandate service
- Data and message usage guidelines
- Third-party payment initiation.

²⁰ A QR code is a two-dimensional barcode that contains information such as the price of the item to which it is attached.

API framework and sandbox

NPPA announced the NPP API framework in September 2018. The framework provides guidance on the design of APIs for the NPP. It establishes the recommended technical approach for APIs and mandatory data elements, removing the need for participants and third-party service providers to build customised APIs. NPPA does not mandate use of the API framework; however, it is encouraged as a way to increase consistency and interoperability between APIs offered by different providers.

The first version of the framework contains three sample APIs that could be used by authorised third parties to: (i) look up a PayID in the Addressing Service, (ii) send a payment initiation request, and (iii) confirm that a payment has been completed. The second version of the framework, released in May 2019, will extend the sample APIs to different NPP functions: (i) cancelling a payment, (ii) requesting the return of a payment, (iii) notification of a payment, and (iv) notification of the return of a payment. NPPA intends to further extend the API framework over time.

To encourage use of the API framework, NPPA and SWIFT have established an API sandbox: a secure, cloud-based facility, for developers to test API solutions for the NPP in an independent environment. This capability will extend over time in line with the API framework and will be enhanced to become more dynamic in nature.

Initially, the range of API solutions offered by participants is likely to vary due to the staged approach taken in individual NPP roll-outs. Importantly, it is NPP participants (or identified institutions) who must provide the API services for their customers to access the NPP, not NPPA itself.

QR code standards

NPPA released a standard for the use of QR codes to generate NPP payment messages in June 2019. The NPP standard is based on the widely used EMVCo QR code specifications and defines the mandatory data elements that are required for NPP payments initiated by a QR code. The standard can be used for both static and dynamic QR codes. This capability has potential application in a range of use cases including bill payment, invoices, e-commerce and even point-of-sale payments.

Consent and mandate service

NPPA is planning a consent and mandate service (CMS) to facilitate the creation and secure centralised storage of standing payment authorisations given by consumer and business customers of different financial institutions. For example, the CMS could be used to store pre-authorisations for regular bill payments, such as rent or utility payments. The CMS will enable the NPP to be used for a range of additional payment types, including recurring payments and third-party initiated payments, and will give customers more visibility and control of their payment authorisations. The CMS will allow the NPP to be used as an alternative to the direct debit system. It will support third-party payment initiation and 'on-behalf-of' payment functionality for use by a range of third-party payment service providers including payroll service providers. NPPA has made an assessment that the broad range of potential applications make it more efficient for the CMS to be provided through the BI as native capability, similar to the Addressing Service. It is expected that the CMS will make it easier for customers to switch banks by allowing them to manage their payment authorisations and link them to a new bank account.

Message usage guidelines

The NPP was designed using the ISO 20022 standard for payment messaging, which can carry much richer information than the 18 characters available for direct entry payments. In addition to the payment instruction, the standard provides for a clearing message to contain more than 1,400 data fields.

NPPA has identified payroll, superannuation and pay-as-you-go (PAYG) tax instalments as areas that are likely to benefit from additional data being carried with the payment in a structured manner. These high-volume payments are often initiated from businesses' accounting or payroll systems and received by the ATO and superannuation funds, without manual processing. The carriage of structured data with these payment types ensures that they are processed efficiently. NPPA began consulting with industry

stakeholders on the development of industry-specific message usage guidelines in early 2019 with the aim of releasing these message usage guidelines later this year.

These guidelines differ from an overlay service in that they do not set a posting standard or define the end-user experience. However, the guidelines are likely to enable use of the NPP for payroll, superannuation or PAYG tax instalments without the need for a specific overlay service designed for these payment types. However, an overlay service provider would have the option of building on top of these message usage guidelines developed by NPPA and incorporating them into its own product or service offering. NPPA has indicated that it also intends to develop message usage guidelines for e-invoicing and insurance payments at a later date.

Third-party payment initiation

While the NPP has to date only been used for credit or 'push' payment messages, another payment message within the ISO 20022 standard is the 'payment initiation' message. Using payment initiation messages, an authorised third party can initiate a payment on behalf of customers of a financial institution or request payments to be made by a customer. The NPP was designed to support payment initiation messages; however, these messages were not certified or tested in the lead-up to the initial launch, and are not currently being used by participants across the BI (although some participants are offering payment initiation messages to customers outside of the BI). The full implementation of payment initiation messages will enable the NPP to cater for a wide range of use cases, such as authorised service providers initiating payroll, superannuation, tax or invoice payments on behalf of their business customers, or as an alternative to the existing direct debit system.

Enabling third-party payment initiation has the potential to substantially increase transaction volumes on the NPP. Customer authorisations will be able to be managed centrally through the planned CMS or bilaterally through arrangements between participants or third parties. The CMS will provide customers with control over their payment authorisations and permit authorised third parties, via APIs, to manage customer authorisations to which they are a party. NPPA's assessment is that the implementation of payment initiation messages with CMS-managed customer authorisations would effectively enable authorised third-party payment initiation on customers' accounts; this would correspond to 'write access' to customer accounts, and could be an element of the future evolution of Open Banking in Australia.

3.2 Assessment

The central infrastructure of the NPP is now providing functionality that has largely filled the gaps identified in the Bank's 2010–12 Strategic Review of Innovation. In particular, the ability to send and receive retail payments in real-time on a 24/7 basis, with immediate funds availability to the payee, richer data and the ability to address payments using the PayID service is a significant enhancement to Australia's retail payment system.

However, the slow roll-out of NPP services by some larger banks has been disappointing and overall NPP volumes have grown more slowly than was initially hoped. While it was always expected that financial institutions connected to the NPP would roll out customer services according to their own schedules and priorities, this roll-out has occurred more slowly than anticipated. While the major banks have now largely completed the roll-out of NPP services to their retail customers, the roll-outs to business and corporate customers are ongoing and some banks have yet to provide NPP services to their subsidiary brands. This stands in contrast to many of the smaller institutions, which connected to the NPP via the aggregators and were able to provide NPP services to their entire customer bases at (or quite soon after) the NPP launch.

In addition, even where NPP services have been enabled, some major banks still have significant functionality gaps in terms of the ways that payments can be initiated or the limits that are placed on

payment amounts. The incomplete reach of the NPP and the partial functionality offered by some of the major banks has disappointed end-users that have been keen to utilise the NPP and has also likely delayed the development of new services that would extend the NPP's capabilities.

The delays experienced by some of the major banks point to the complexity of their internal systems, the fact that they have many other projects underway, and the challenges for security and operational reliability of moving to real-time and 24/7 payments. Some of the banks appear to have significantly underestimated or underfunded their internal projects in this regard and there may also have been insufficient oversight of projects by senior executives and boards of financial institutions. Given that there remains significant work to be done to realise the full potential of the NPP, the Bank will be continuing to push the major banks to prioritise the roll-out of services to their customers and ensure that significant functionality gaps are addressed as quickly as possible.

As discussed in Box A, NPPA is working on an ambitious agenda to enhance the native capabilities of the platform. In addition, BPAY is still planning to extend the capabilities of Osko to allow a document to be attached to a payment and to send and receive payment requests, though progress here depends on the NPP participants being in a position to commit to the additional work that is required to deliver these services. The Bank strongly supports the development of these planned capabilities and believes that if they are fully implemented they could address many of the functionality needs that were raised by stakeholders in the consultation. While the Bank does not wish to dictate how these capabilities should be delivered from a technical perspective, we believe that NPPA and its participants should publicly commit to a roadmap for when they will be made available to end-users and to periodically update this roadmap over time.

However, while a roadmap will assist, the experience to date highlights the risk that delays in the projects of particular participants may threaten the delivery or launch of some of this additional functionality. Here, it may be useful to draw on practices of some other payment systems where the scheme operator has the power to mandate certain action or behaviour by participants; this is common in the card systems, for example. Accordingly, the Bank believes the NPPA Board should have the power to mandate that changes to the central infrastructure or native capabilities of the NPP must be supported by participants within a specific timeframe, backed up by an enforceable sanctions framework (including possible financial penalties) for participants that do not comply. We are recommending that NPPA introduce such a mandate framework by the end of 2019 and that it be used to support the timely delivery of agreed functionality. Ultimately, if additional functionality were not delivered within a reasonable period of time, the Bank could consider a regulatory approach to require the NPPA and/or its participants to provide specific functionality if it was deemed to be in the public interest to do so and was consistent with the Bank's mandate to promote competition and efficiency and control risk in the payments system.

Regarding the role of overlay services in the NPP, the consultation revealed some misunderstandings on the part of some stakeholders. The Bank notes that many fintechs and other entities that have expressed interest in becoming overlay service providers might actually be able to implement their business models using NPP functionality provided by an existing bank relationship or alternatively as an identified institution. That said, to help promote competition and innovation, the Bank believes it is important that there are no unnecessary barriers to creating overlay services. In this context, the Bank notes the concerns some stakeholders raised about sharing confidential information with NPPA, which might be seen by participants that have interests in competing overlay services. The Bank believes NPPA should put in place procedures that address these concerns. These should clarify how confidential information will be handled during the application process and the role of NPPA

management and potentially the independent directors, versus the broader NPPA Board, in approving overlay services. As regards suggestions by some stakeholders that all participants must be required to subscribe to NPP overlay services, the Bank does not see a case for such a mandate. Instead, the presumption should be that participants will subscribe to an overlay service because they see value in it, just as they can choose to offer any other service that delivers value to their customers.

Recommendations:

- NPP participants should prioritise the roll-out of NPP services to their entire customer base and address any functionality gaps that currently exist in their customer offerings.
- Starting no later than end September 2019, NPPA should periodically publish a roadmap of the additional NPP functionality it has agreed to develop and the expected time period over which it will be delivered. The roadmap should be updated at least semi-annually.
- By end December 2019, NPPA should introduce a power for its Board to mandate that specified NPP core capabilities must be supported by NPP participants within a specific period of time, with an enforceable sanctions regime (including possible financial penalties) to apply if participants do not comply.
- By end September 2019, NPPA should publish its process for assessing potential overlay services, including how confidential information on the plans of potential overlay service providers will be controlled and the respective roles and responsibilities of the NPPA management, independent directors and the broader NPPA Board in approving overlay services.

4. Access to the NPP

The arrangements for how entities connect to the NPP has been another focus of this consultation. As was discussed in Chapter 2, the NPP was designed to facilitate a number of different types of access to the central infrastructure to cater for different business models, with risk-based eligibility criteria applying to each. The eligibility criteria and the process by which NPPA assesses and determines applications to participate are set out in the NPP Regulations, which are published on NPPA's website.

From one perspective, the NPP's access arrangements would appear to be working quite well considering that a large number of entities are already connected to the platform, including 68 smaller ADIs that are indirectly connected via aggregators or other participants and successfully providing NPP services to their customers. Moreover, it could be argued that indirect access to the NPP is all that most financial institutions need, given they can access the same functionality and avoid the costs and complexity associated with being a direct participant. The model in which there is a relatively small group of direct participants providing access to a larger number of indirectly connected entities is common in other payment systems, such as the Bulk Electronic Clearing System (BECS). This reflects that it is usually the most efficient and secure way to structure access to network infrastructure. The latter is particularly important in the case of a real-time payments system like the NPP, where there are significant operational, security and financial risks that need to be managed.

However, there will be cases where indirect access to the NPP is not available to an entity or where it does not meet its needs. For example, there may be competitive reasons why an entity does not wish to rely on another financial institution to provide it with NPP connectivity. In addition, there are an increasing number of entities providing specialised payment services that may not be eligible to become ADIs because they do not take deposits or make loans. It is therefore important that the eligibility criteria and associated governance arrangements for determining participation strike the right balance between promoting open access and protecting the safety and integrity of the platform.

It is in this context that the consultation sought stakeholder views on whether the various ways of accessing the NPP and the associated technical and other eligibility requirements were adequate for different business models, or whether other forms of access or eligibility requirements may be justified. The feedback received from stakeholders can be grouped into four broad areas: the requirement for NPP participants to be ADIs licensed by APRA; the requirement for new participants to become shareholders and subscribe to shares in NPPA; NPPA's governance arrangements for access decisions; and the structure and transparency of NPP transaction fees and how this influences access decisions. This chapter summarises this stakeholder feedback and provides the Bank's assessment and a number of recommendations.

4.1 The ADI Requirement for Participants

The NPP Regulations stipulate that to be an NPP participant, an entity must be an ADI licensed and regulated by APRA.²¹ ADIs are subject to extensive prudential requirements and oversight by APRA including in relation to capital, liquidity, business continuity management, financial and regulatory reporting, governance and risk management. Entities that have a conditional ADI licence from APRA (such as providers of purchased payment facilities) or a restricted ADI licence (RADI) under APRA's new licensing regime are also eligible to apply for participation in the NPP.

4.1.1 Issues and stakeholder views

A number of stakeholders, particularly some fintechs, viewed the ADI requirement as an excessive and unnecessary barrier to entry that undermines competition. They argued that entities providing specialised payment services may not qualify for an ADI licence given the nature of their business and so were effectively blocked from becoming NPP participants. And even if an entity could structure its business in a way that might qualify it to become an ADI, the process of obtaining an ADI licence was seen as costly and time consuming, with significant ongoing compliance and reporting obligations that impose a substantial burden.

Stakeholders observed that non-ADIs with an ESA are able to become Tier 1 (clearing and settlement) participants in the Bulk Electronic Clearing System (BECS) for direct entry payments that is administered by AusPayNet. They also observed that it is possible for non-ADIs that are providers of third-party payment services to obtain an ESA with the Reserve Bank.²² Stakeholders argued that if it was possible for non-ADIs to obtain an ESA and become Tier 1 members of BECS, then it should also be possible for them to become direct participants in the NPP.

Stakeholders generally accepted that NPP participants should be subject to appropriate standards of risk management and operational capability. Some stakeholders considered that holding an Australian Financial Services (AFS) licence administered by ASIC should be sufficient regulatory status for direct participation in the NPP, though they did not address the issue of whether ASIC's regulatory requirements and the obligations imposed on AFS licensees could address all the concerns that motivate NPPA's ADI requirement.

The Productivity Commission also raised concerns about the ADI requirement in its 2018 report. It observed that from a practical perspective, an entity technically only needed an ESA to participate in the NPP (to settle payments) and that the Reserve Bank does not require an entity to be an ADI to hold an ESA. The Commission argued that, in addition to lowering barriers to entry, allowing ESA holders to participate in the NPP could mean payment providers are not reliant on their competitors to operate. It recommended that, as part of an access regime imposed on the NPP, the Payments System Board should allow payments providers that hold an ESA to connect to the NPP as participants without the need for them to be ADIs.

NPPA explained that the requirement for an NPP participant to be an ADI was considered necessary to ensure prudential safeguards for the platform, and suggested that this was in line with well-established international standards for payment systems, such as the CPMI-IOSCO Principles for

21 See NPP Regulations, Part 4.2 Eligibility – all NPP participants. Any entity carrying out 'banking business' as defined in the *Banking Act 1959*, is required to be licensed as an ADI by APRA.

22 See Bulk Electronic Clearing System (CS2) Regulations, Part 4 Membership as a Framework Participant.

Financial Market Infrastructures (PFMI).²³ NPPA particularly noted that ADIs are required to meet an extensive range of prudential requirements, including with respect to operational and IT security risk management, are required to hold capital against losses, and are subject to rigorous ongoing oversight and supervision by APRA. NPPA argued that entities that are not ADIs, and therefore not prudentially supervised by APRA, would not provide the required level of counterparty assurance and comfort to NPPA and NPP participants. In particular, there is no assurance that these entities would have the technical and operational capability to perform the required NPP functions and to manage data security and fraud risks and meet associated liabilities. NPPA has also noted that it is a small organisation without the resources to conduct the extensive assessments of new applicants that it believes are necessary to protect the integrity and stability of the platform, and therefore relies on the prudential oversight by APRA to provide this assurance.

NPPA also noted that it is possible for non-ADIs to access the NPP without being reliant on competitors. In particular, there are a large number of entities that have accessed the NPP as identified institutions using the services of three aggregators – Cuscal, ASL and Indue – which specialise in providing wholesale payment services to other entities and do not compete in the retail market. Notwithstanding this, in a confidential submission, one stakeholder indicated that it had struggled to maintain banking relationships because of the nature of its business and claimed it had also encountered difficulties negotiating indirect NPP access with the aggregators. This entity wished to become a direct participant in the NPP so that it could ensure reliable access to the payments system and was not dependent on other entities, which could withdraw access at any time.

The Productivity Commission and some other stakeholders noted that there is a regulatory regime for non-bank payment providers in the United Kingdom that has facilitated the direct connection of these entities to the UK's Faster Payments Service, the UK's equivalent of the NPP.²⁴ The Commission had suggested that the Payments System Board should consider developing a regulatory regime for non-ADI specialist payment providers in Australia. NPPA indicated that if there was a regulatory regime for non-ADI payment providers in Australia it would consider amending its eligibility criteria to allow these entities to apply to be participants in the NPP.

4.1.2 Assessment

The security and resilience of the NPP is of paramount importance to promote confidence in the system. It is therefore reasonable to expect that NPP participants, which are directly connected to each other and involved in the real-time clearing and settlement of payments through the NPP, should meet minimum standards of operational and IT security risk management. While APRA's prudential oversight of ADIs provides a high degree of assurance in this regard, the Bank is not convinced that this should be a prerequisite to participate in the NPP. There may be entities that are

23 See BIS and IOSCO (2012), '[Principles for Financial Market Infrastructures](#)', April. Principle 18 of the PFMI, which deals with access and participation requirements, recommends that FMIs (including payment systems) 'should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.' The PFMI do not stipulate that direct participants in payment systems should always be prudentially regulated entities. Instead, they advise that 'if an FMI admits non-regulated entities, it should take into account any additional risks that may arise from their participation and design its participation requirements and risk-management controls accordingly.'

24 A settlement account at the Bank of England is required to directly connect to the UK Faster Payments Service. Following a policy change by the Bank of England in July 2017, non-bank payments and e-money institutions may apply for a settlement account, following authorisation by the UK Financial Conduct Authority under the *Payment Services Regulations 2017*.

ineligible to become ADIs because of the nature of their business (e.g. because they are specialised payment providers and do not take deposits or make loans). However, they might still be able to meet reasonable and relevant technical, operational and risk management requirements to participate in the NPP. It would seem an unsatisfactory outcome if these entities had to restructure their business to obtain an ADI licence just so that they could become an NPP participant. Instead, there should be other ways NPPA can get the level of counterparty assurance and comfort it desires without relying on the existence of an ADI licence and APRA's prudential supervision.

While some stakeholders suggested that holding an AFS licence should be sufficient to become a participant in the NPP, the Bank notes that the obligations imposed on AFS licensees are primarily designed to address consumer and investor protection issues rather than the specific concerns associated with participation in a payments system like the NPP. Accordingly, merely holding an AFS licence is unlikely to provide the kind of assurances that NPPA and existing NPP participants might reasonably be seeking from new participants.

In regard to the suggestion of a new regulatory regime for non-ADI specialist payment providers in Australia, the Bank observes that this is not realistic in the near term, given that it would require significant policy development and consultation, and then legislative change. However, the Bank is intending to explore such a regime, together with the other agencies in the Council of Financial Regulators.

As noted earlier, some stakeholders argued that if non-ADIs can become Tier 1 participants in BECS, they should be able to become NPP participants as well.²⁵ However, it is important to note that BECS and the NPP are very different payment systems, subject to different risks, and so it may be appropriate for them to have different participation requirements.²⁶ Moreover, there have not been any formal applications from non-ADIs to be Tier 1 participants of BECS yet so it is not possible to assess how the requirements for non-ADI participation in BECS have worked in practice.

Given these various considerations, the Bank is recommending that NPPA should consider revising its participation requirements to allow non-ADIs to become participants. The participation of non-ADIs could be subject to a specific set of risk management, operational, financial or other requirements that are tailored to, and commensurate with, the specific risks that NPPA and its participants are seeking to manage. For example, participation in the NPP might be related to holding an ESA at the Reserve Bank. The participation requirements for non-ADIs would be publicly disclosed along with guidance on how applicants can demonstrate that they meet the various requirements. This might, for example, include the possibility that an applicant could provide an assessment of its risk management and operational capabilities from a suitably qualified and independent third party, such as a professional advisory firm.

25 The requirement for Tier 1 BECS participants to be ADIs was removed in 2015 to allow specialist payments providers to participate. To ensure the integrity of the system, prospective Tier 1 participants that are not ADIs are subject to some restrictions and need to meet additional assurance and reporting requirements. The removal of the ADI requirement followed a decision of the Payments System Board in 2014 to vary the Access Regimes applying to the designated MasterCard and Visa systems in Australia and the removal of the specialist credit card institution framework, administered by APRA. For more details see RBA (2014), '[Payment Card Access Regimes: Conclusions](#)', March.

26 For example, BECS is a deferred settlement system, while NPP uses real-time settlement – settlement risks are lower in the NPP, but risks associated with fraud, IT security and other operational issues are likely to be higher because of the real-time settlement.

Recommendations:

- Direct access to the NPP should be open to a range of payments services providers. NPPA should assess and report on options for amending the NPP Regulations, and other arrangements, to allow for an entity that is not an ADI to potentially become an NPP Participant. The participation of non-ADIs would be subject to requirements appropriately tailored and calibrated to the key risk and operational considerations essential for participation in the NPP. NPPA should:
 - by end October 2019, submit to the Bank and the ACCC an assessment of options for revised participation requirements for non-ADI participants
 - by end March 2020, implement any revised participation requirements for non-ADI participants.

4.2 The Shareholding Requirement for Participants

The NPP Regulations currently state that to be an NPP participant, an applicant must become a shareholder and subscribe to shares in NPPA.²⁷ The amount of shares a participant would be required to subscribe to is determined by the shareholder ‘governance band’ – high, medium or low – they are allocated to. This allocation would be determined by the NPPA Board taking into consideration the applicant’s significance in the Australian payments system and likely significance to the NPP.²⁸ For at least the first two years of the NPP’s operation, there is a requirement that new participants subscribe to the same amount of shares as the initial participants in the same governance band. An applicant allocated to the lowest band would currently be required to purchase around \$2 million of NPPA shares.²⁹

The governance bands are also relevant to the appointment of directors. High-band shareholders (currently the major banks) each have the right to appoint one Director, while medium- and low-band shareholders may together elect up to four Directors. NPPA’s Constitution allows for the payment of dividends on shares, but NPPA has stated that there is no intention of paying dividends in the foreseeable future. Instead, it expects any profits the NPP generates to be reinvested to build additional functionality and extend the capabilities of the platform. The Constitution also prescribes that shareholders may not transfer their shares, except to a related entity. Shareholders can choose to redeem their shares, but only at a nominal redemption value of \$0.01 per share (compared with an issue price of \$1,000 per share).

4.2.1 Issues and stakeholder views

A number of stakeholders argued that the requirement to become a shareholder of NPPA and to subscribe to shares was a barrier to entry for start-ups and other firms that have limited capital and

27 See NPP Regulations, Part 4.7 Application to become an NPP Participant or Connected Institution.

28 Currently there are 4 high-band shareholders (the major banks), 7 medium-band shareholders (including the RBA); and 2 low-band shareholders. The initial contributions of the four major banks represented about 75 per cent of NPPA’s capital, but the intention is that this shareholding could be reduced to 70 per cent as new participants join.

29 There is also an application fee payable to NPPA. It is important to note that there are also a range of other costs a new participant would incur in connecting to the NPP, including those associated with provisioning, installing and testing the NPP componentry and integrating it with the participant’s internal systems as well as uplifting capabilities required to process payments in a real-time environment such as fraud detection and prevention capabilities. These costs are likely to be significantly higher than the shareholding requirement.

are trying to grow their business. They argued that the amount of the contribution was disproportionately high compared with the contributions required to directly connect to fast payment systems in other countries, such as the United Kingdom.³⁰ Stakeholders also argued that since NPPA shares are not expected to pay dividends, are not transferable and cannot be meaningfully redeemed, they are more like a membership fee than an investment in shares. They found it particularly problematic that an entity that decided to no longer be a participant would not receive any funds from its shareholding.

NPPA stated that the requirement to subscribe for shares reflected the design of the NPP as a mutually-owned industry infrastructure, where having a dispersed ownership would help ensure the NPP is operated and evolves to meet the needs of its participants and their customers. It noted that new participants would bring capital that would enable NPPA to fund the continuing development of core capabilities and investment in future functionality, which would drive further innovation. Other NPP participants noted that the capital contribution was justified given the commercial benefit a participant gets from being a direct clearing and settlement participant and the fact that they are also able to offer indirect connectivity to other entities.

NPPA indicated that over time there may be scope to reduce the subscription levels for new participants as growth in operating revenues becomes sufficient to meet future investment needs. The cost of membership might eventually be expected to fall towards the direct and indirect costs of establishing connectivity. The NPPA Shareholders' Agreement states that the requirement for new participants to contribute the same level of funding as existing participants would be reviewed by NPPA's Board after two years of operation.

4.2.2 Assessment

The Reserve Bank was involved in the challenging industry discussions in late 2014 that culminated in the agreement to fund NPPA and sign the contract with SWIFT to build and operate the NPP. Based on this experience, the Bank considers that an initial requirement regarding capital contributions was necessary to ensure that the project was funded. In particular, if entities had been given the option to wait until the NPP was already built and operating and then become a participant without contributing any capital, there would have been little or no incentive for them to fund the development of the NPP in the first place. To overcome this problem, it was deemed necessary to stipulate in the NPPA Shareholders' Agreement that, at least for the first two years, any new participants would need to subscribe for shares at the same level as initial participants of comparable size.

There are a few arguments that could be made for a continuation of the current requirement regarding capital contributions for new shareholders. First, NPPA has ongoing capital and financing needs, especially (as discussed in Section 4.4) given that transaction volumes remain well below the levels that would allow full cost-recovery pricing that will encourage migration of payments from other payment systems. Second, there is an issue of fairness for those entities, such as the aggregators, that contributed funds to build the NPP on the basis that they would be able to benefit from their investment by providing third-party agency services once it launched. These entities would be competitively disadvantaged if other entities providing third-party agency services were able to

30 For example, one stakeholder indicated that there was no shareholding requirement to join the UK's Faster Payments Service as a direct participant but there were some upfront fees to the scheme operator for implementation and testing. The scheme operator was also said to charge ongoing fees.

join the NPP soon after it launched without contributing any capital. Third, given that so many entities have obtained indirect access to the NPP as identified institutions, with no shareholding contribution, the requirement that participants are shareholders does not appear to have been a significant barrier to access.

While these arguments may justify a continuing shareholding requirement in the short term, they need to be balanced against the potential harm caused by any reduction in competition and innovation that the shareholding requirement may create in the longer term. This may be most relevant in the case of smaller entities that perceive a particular need to be a participant rather than to connect indirectly, and for which the minimum capital contribution of \$2 million would be a very significant amount. There is also an argument that newer entities, which did not exist at the time of the initial funding decision and so did not have the opportunity to sign up at that time, should not be unduly restricted by a shareholding requirement that was largely designed to incentivise institutions to agree to fund the NPP in late 2014.

On balance, the Bank believes NPPA should review its current shareholding requirement and introduce more gradation, at least in the lower band, so that subscription requirements can be more closely tied to an entity's size or expected contribution to NPP transaction volumes. It should also establish an access route for direct participation that is based either on acquiring shares in instalments or on periodic subscription fees (without becoming a shareholder), rather than an upfront purchase of shares. This access route would be set on an economically neutral basis, which would make NPPA indifferent between receiving capital instalments, periodic fees or the existing upfront contribution. As part of the review, NPPA should give consideration to allowing entities that did not exist when the NPP was being built to join at a lower subscription level than entities that did exist when the NPP was being built and chose not to contribute. Following its review, NPPA should publicly disclose its share subscription requirements so that entities can make informed decisions about their access options.

Recommendations:

- By end December 2019, NPPA should introduce more gradation into the shareholding requirement by creating at least one additional lower band, so that subscription requirements can be more closely tied to an entity's size or expected contribution to NPP transaction volumes.
- By end December 2019, NPPA should establish an access route for direct participation that is based either on acquiring shares in instalments or on periodic subscription or membership fees, rather than the upfront purchase of shares.
- By end December 2019, NPPA should consider allowing NPP participant applicants that did not exist when the NPPA was being developed to subscribe to a lower amount of shares than usual.

4.3 NPPA Governance

NPPA's Board is responsible for its corporate governance. The company currently has 12 directors, including the CEO. There are two independent directors, one of which is the Chair.³¹ Each of the four major banks and the Reserve Bank are able to appoint a director. The other four directors are elected by the remaining small and mid-size shareholders of NPPA.³² Each Board director has one vote except for the CEO who is a non-voting director.

The requirements and process for an entity to become either a participant, connected institution or an overlay service provider are contained in the NPP Regulations and allow a role for the NPPA Board in the determination of applications.³³ However, the Regulations state that the Board shall accept, subject to any conditions it considers reasonably appropriate, each new applicant that satisfies the company's technical and other eligibility requirements. They also allow for an applicant to request that a sub-committee of the Board review any determination by the Board that an applicant does not meet the relevant eligibility requirements. In practice, the process of assessing applications against the eligibility criteria is carried out by NPPA's management under a delegation of authority to the CEO. The NPPA Board would as a final step be asked to approve an application once it has been assessed by NPPA management as meeting the eligibility criteria.

4.3.1 Issues and stakeholder views

Some stakeholders expressed concerns about the governance of the NPP in relation to how access is determined. They worried that eight of the twelve NPPA directors are appointed by ADIs that may have incentives to restrict new entrants from access to the NPP for competitive reasons. There is a perception among fintechs that the Board is dominated by directors that represent the interests of the incumbent banks. One submission noted that there is no independent appeal mechanism if an application to be a participant or connected institution is refused. Another submission suggested that to overcome the potential for conflicts of interest to influence access decisions, the Payments System Board should be responsible for assessing applications for participation in the NPP.

Some of these views echoed concerns raised by the Productivity Commission in its 2018 report into Competition in the Australian Financial System. The Commission noted that a 'model that requires new competitors to be accepted by incumbents can reasonably be expected to involve conflicts of interest.'³⁴ While the NPP Regulations specify a mechanism for unsuccessful applicants to appeal the decision, the review is not undertaken by an independent party but by a subcommittee of the Board. The Commission suggested that it could be difficult to discern whether an applicant was denied access on the basis of risk considerations or because it was considered a competitive threat to the existing NPP participants.

In its submission, NPPA highlighted that its constitutional objectives are to operate the NPP in a manner that promotes the public interest, including by 'facilitating fair access to the NPP as mutually owned utility infrastructure.' In this context, 'facilitating fair access' is interpreted by NPPA as an

31 According to Article 10.7 of NPPA's Constitution, independent directors are personally and professionally independent of NPPA members and related bodies corporate of members.

32 The current directors of NPPA are listed here: <https://www.nppa.com.au/the-company/board-and-leadership-team/>

33 NPP Regulations, Part 4 (available at: <https://www.nppa.com.au/the-company/governance/>)

34 Productivity Commission (2018), *Competition in the Australian Financial System*, Inquiry Report No. 89, page 508.

obligation of NPPA to enable access to the NPP on non-discriminatory terms.³⁵ Reflecting this, NPPA noted that its governance arrangements have been deliberately structured to promote access and avoid and manage any potential conflicts of interest. For example, the Board has delegated to NPPA management the initial assessment of new applications for participation and though it is expected that the Board would be involved in the final determination, the NPP Regulations require the Board to accept an applicant that meets all of the technical and other eligibility requirements. NPPA also made the point that as a network infrastructure with mainly fixed costs of operation, it is in the interests of all participants to grow the network and build volume in order to bring transaction fees down.

NPPA also noted that a number of governance arrangements have been put in place to counterbalance the influence of the major banks. Whereas the major banks have contributed around 75 per cent of the capital of NPPA, they appoint only four of the NPPA's 11 voting directors and voting rights of directors are equal, rather than proportional to shareholdings (unlike in some other payment systems). Board decisions require the support of at least two-thirds of directors present and at least eight directors must be present for a Board meeting to proceed. Some NPP participants also noted that the Board has two independent directors and one director appointed by the Reserve Bank, which do not represent any particular commercial interests. In any case, NPPA noted that its directors have fiduciary obligations under the *Corporations Act 2001* to act in the best interests of the company, to avoid conflicts of interest, and to disclose and manage any conflicts if they arise.

4.3.2 Assessment

The Reserve Bank considers that it is reasonable to expect that the shareholders that made substantial investments to build the NPP should have a right to be represented on the Board. We note that the major banks do not have a majority of the votes on NPPA's Board, despite owning a majority of the shares. There are currently two independent directors (including an independent chair) and a director appointed by the Reserve Bank under its power to do so, granted in recognition of the importance of the FSS to the operation of the NPP.

The possibility that incumbents might keep out new entrants appears to be only hypothetical at this stage – the Bank is not aware that any access applications have been denied, let alone unfairly influenced by NPPA's governance structure. However, this is in an environment where the current ADI and shareholding requirements may have prevented a number of potential applicants. In any case, there is a widespread perception that NPPA's Board is dominated by the incumbent banks, and that there may be conflicts of interest that could hamper access for new entrants. Therefore, to strengthen the governance of NPPA, ensure that the Board represents a broader range of perspectives, and reduce the influence of incumbent financial institutions, the Bank believes NPPA should appoint a third independent director. We note that the NPPA Shareholders' Agreement was amended in 2018 to accommodate the appointment by the company of a third independent director, but no such appointment has been made as yet.

The Bank also believes it is important to ensure that there is an independent review mechanism for access decisions for prospective participants, connected institutions and overlay service providers. This will require a stronger governance arrangement than the current Board subcommittee specified in the NPP Regulations. Therefore, we are recommending that, where an applicant wishes to have a

35 NPPA (2018), Post-draft Submission to the Productivity Commission Inquiry into Competition in the Australian Financial System, 29 March 2018, Schedule 1, page 3 (available at : https://www.pc.gov.au/_data/assets/pdf_file/0007/226762/subdr122-financial-system.pdf)

Board access decision reviewed, the review should be by a panel comprised of three independent Board members (possibly including the RBA-appointed director) and two independent external payments experts (to be selected by the independent directors). The panel should have the binding power to overturn the earlier denial of an application if the applicant is deemed by the panel to have met all of NPPA's published eligibility requirements. In addition to considering appeals from decisions of the Board, the panel should also have a role assessing applications directly (that is, without going via the full Board) where NPPA management does not assess the applicant as having met the eligibility criteria. The panel should also have the power to ask NPPA to review the access criteria if it believes the criteria impose unreasonable conditions.

The Bank further believes that transparency about NPP access decisions is in the public interest and would help stakeholders form accurate perceptions about NPPA's governance. Therefore, the Bank is recommending that at least once a year (possibly in its annual report), NPPA publish the number of participant and connected institution applications it received during the preceding year and the outcomes of those applications, including a summary of the key reasons (de-identified as necessary) in cases where applications were not supported by the Board. In addition, NPPA should inform the Reserve Bank's Payments Policy Department whenever an application for access has been rejected by the NPPA Board. This will ensure there is timely and independent oversight of NPPA access decisions and an opportunity for the Bank to raise concerns if the decision is not considered to be in the public interest.

The Bank believes these steps to strengthen the governance of NPPA access decisions will provide greater confidence to potential new entrants that access decisions will be fair, objective and not biased by any competitive considerations of existing NPP participants.

Recommendations:

- NPPA should appoint a third independent director by end September 2019.
- By end December 2019, NPPA should review its arrangements for applications for access as a participant, connected institution or overlay service provider. Where an application has been rejected by the NPPA Board, or by NPPA management during its initial assessment, the applicant should be able to ask for a review of the decision by an Evaluation Panel. The Evaluation Panel should be comprised of three independent directors and two independent external experts appointed by the three independent directors. The Panel should have the binding power to overturn the earlier denial of an application if it decides that the applicant has met all of the eligibility requirements and also the power to ask NPPA to review the access criteria if it believes the criteria impose unreasonable conditions.
- At least once a year, NPPA should publish a report of the number of applications for access that it received during the preceding year, the outcomes of those applications, and a summary of the key reasons in cases where applications were ultimately not supported by the NPPA Board. The first report should cover the financial year ending June 2019.
- NPPA should notify the Reserve Bank's Payments Policy Department within one week whenever an application for access to the NPP (as a participant or connected institution) is not supported by NPPA's Board.

4.4 NPP Transaction Fees

There are broadly two types of NPP transaction fees.³⁶ The first are ‘wholesale’ fees that NPPA charges its participants. These are fixed fees (in cents rather than percentage terms) per transaction sent through the NPP, and are the same for all participants. These fees are intended to be NPPA’s main source of revenue to cover its operating costs, the largest part of which is the fees charged by SWIFT to operate the NPP network. To date, the wholesale transaction fees set by NPPA have not been made public. The second type of fees can be considered ‘retail’ and includes transaction fees that aggregators and other participants charge sponsored entities for processing NPP transactions and the fees that financial institutions charge their end-customers for making NPP payments. Retail fees are determined by commercial arrangements between financial institutions and their customers, not by NPPA.

4.4.1 Issues and stakeholder views

A number of submissions expressed concerns about the various transactions fees involved in using the NPP and the influence they can have on decisions to access and use the platform. The main concern relating to the wholesale fees charged by NPPA was that they are not publicly disclosed. This lack of transparency was seen as making it difficult for entities considering becoming identified institutions to evaluate whether they were getting a fair deal from the aggregators or other participants offering to sponsor them. In addition, it was argued that the lack of transparency made it difficult to evaluate whether it was preferable to invest in becoming a participant and pay the wholesale transaction fee or to connect indirectly (with a much lower upfront cost) as an identified institution and pay what was likely to be a higher ‘retail’ transaction fee levied by the sponsoring participant. More generally, stakeholders viewed the lack of transparency about NPPA’s fee-setting policies as making it difficult to formulate business plans and negotiate access without directly engaging with NPPA.

Stakeholders noted that NPPA’s wholesale fees were intended to be set on a cost-recovery basis. However, there were concerns that the transaction fees charged by aggregators and other participants providing sponsored access could include large mark-ups, making it difficult for identified institutions to provide competitive NPP services to their own customers. Consequently, a few submissions recommended that the transaction fees charged to non-NPP shareholders should be regulated by the Payments System Board. Underlying these concerns seems to be a view that there is insufficient competition in the market for providing third-party access.

In its 2018 report, the Productivity Commission suggested that the Payments System Board should review whether NPPA’s wholesale fees were being set on a purely cost-recovery basis and intervene to regulate if the fees were deemed excessive. Regarding ‘retail’ transaction fees, the Commission was also concerned about the potential for participants to extract excessive fees from identified institutions in a way that could undermine competition. The Commission suggested that the Payments System Board should review the transaction fees charged by NPPA and by sponsoring participants as part of an access regime for the NPP.

³⁶ In addition, there is a fee capped at 1 cent that the Reserve Bank charges for each transaction settled through the FSS, split equally between the payer’s and payee’s institutions, and BPAY charges fees for Osko transactions. NPPA may also levy other fees, including for use of the Addressing Service and annual administration fees, as described in NPP Regulation 3.1(c).

NPPA noted that, consistent with its constitutional objective to operate the NPP as a ‘mutually-owned utility’, the intention is for the company to be an ‘economically self-sustaining entity’ rather than profit-maximising and that there are no plans to pay dividends to shareholders or repay capital contributions. Wholesale transaction fees paid by participants are expected to be NPPA’s sole source of operating revenue, and the medium-term intention is that the fee will be set at a level that, based on expected transaction volumes, will cover NPPA’s operating costs and any needed investment in the platform. NPPA argued that it is in its commercial interest to maximise transaction volumes across the platform and keep the wholesale transaction fee low to be competitive with alternative payment methods.

However, NPPA noted that transaction volumes are still at a level well below what is expected in the medium term so that if the wholesale fee were being set on a full cost-recovery basis, it would be quite high, which would be a disincentive to use the platform. Accordingly, the wholesale fee has so far been set well below the full cost-recovery level and shareholders have been asked to make additional contributions to cover the shortfall in NPPA’s operating costs. NPPA indicated that, to date, the wholesale fee has not been published because it does not provide an accurate measure of what it costs a participant to provide NPP transactions for its customers. Once transaction volumes have increased to a level where full cost-recovery pricing is occurring, NPPA management said it would likely recommend to its Board that the wholesale NPP fee be published.

4.4.2 Assessment

There appears to be significant confusion and some unjustified suspicion among stakeholders about NPPA’s pricing and revenues, which may be undermining confidence in the competitiveness of third-party access services and making it harder for entities to determine the best way to interact with the NPP. The confusion largely arises because NPP’s wholesale transaction fees are not published, meaning potential users lack insight into the inherent costs of using the platform and a benchmark to compare ‘retail’ transaction prices. However, as NPPA has noted, the current wholesale transaction fee set by NPPA’s management is not an accurate measure of the overall costs faced by participants in facilitating NPP payments. As an indication, using the operating costs NPPA reported in its latest annual report (for 2017/18) and average annualised transaction volumes in the six months to March, would imply a wholesale transaction fee on a cost-recovery basis of around 20 cents per transaction. This is significantly higher than the wholesale transaction fees that apply in other retail payment systems such as BECS, and so it has not been in NPPA’s competitive interest to levy such a fee when it is seeking to grow transaction volumes. Instead, the wholesale fee has been set at a significantly lower level and NPPA’s shareholders have been asked to make additional contributions to cover NPPA’s operating costs.

In principle, the Bank agrees with stakeholders that more transparency about the wholesale transaction fee would be in the public interest, especially given the intention for NPP to be operated as a non-profit maximising utility infrastructure. Publication of the wholesale fees could help potential identified institutions evaluate the pricing offered by sponsoring participants. End-users would also be able to better understand the underlying costs that influence the prices financial institutions charge their customers for NPP services. Therefore, the Bank is recommending that, once it moves to cost-recovery transaction pricing, NPPA begins publishing its wholesale transaction fee and the methodology for determining it. In the meantime, it may be useful for NPPA to clarify in its Annual Report what the implied break-even wholesale transaction fee would have been, so that the market has better visibility of the full cost of NPP transactions to participants, based on current volumes.

In relation to pricing of NPP transactions to sponsored entities, the Bank believes this is a commercial matter for individual entities providing NPP services and their customers. There are several NPP participants – initially just the three specialist aggregators but now also some of the major banks – that compete to provide indirect access for entities (ADI or non-ADI) that wish to connect to the NPP. It is reasonable to expect that the fees – including transaction fees – these entities charge sponsored entities are subject to competitive pricing and the Bank has not been made aware of any pricing outcomes that would suggest insufficient competition. Therefore, the Bank does not see a case at this time for monitoring or regulation of the fees that NPP participants charge sponsored entities. Publication of the wholesale transaction fee should promote competitive pricing for NPP sponsorship, particularly if the barriers to direct NPP participation are also lowered, as recommended elsewhere in this report.

Similarly, the Bank believes that pricing of NPP services to households and businesses is a commercial matter for the financial institutions providing those services. So far, there has been a range of experience in how financial institutions are pricing their NPP services, with most institutions choosing to charge their business customers for NPP transactions but not their household customers. As noted earlier, there are 80 financial institutions currently providing NPP services to end-users and that number is expected to grow. The pricing of NPP services to end-users will be subject to competitive pressures and the Bank does not see a role for itself in regulating such prices.

Recommendations:

- From its first pricing review after July 2019, NPPA should publish data on its wholesale transaction pricing. Prior to the introduction of full cost-recovery pricing, NPPA should publish the wholesale transaction fee that would be implied by full cost-recovery pricing. Following the introduction of full cost-recovery pricing, it should publish its wholesale transaction fee and the methodology it has used to determine that fee.

5. Conclusion

The Reserve Bank, with support and input from the ACCC, has undertaken a public consultation on the functionality of, and access to, the NPP. The overall conclusion from this consultation is that the NPP is enabling new payments functionality that largely addresses the gaps identified by the Bank in its 2012 Strategic Review of Innovation. The Bank agrees with stakeholders that pointed out that much of the perception about lack of functionality and access difficulties is related to the slow roll-out of the NPP by some of its participants. It is now over a year since the NPP was launched and some major banks are still in the process of making NPP payments available to customer segments. Given that payment systems are networks that often require a critical mass, the slow progress within some participants has delayed the development of some of the planned 'central' functionality – for example, no decision has yet been made regarding the request-to-pay and payment-with-document overlay services. The slower than expected roll-outs by some participants appears to reflect the complexity of their systems and underestimation of the degree of investment needed to meet delivery timeframes.

The slow and uneven roll-out of NPP services has been disappointing and the Bank will continue to push participants to prioritise their development of NPP services. To overcome possible coordination issues amongst participants in the development of new capabilities, the Bank is recommending that NPPA's Board introduces a power for it to mandate that specified NPP core capabilities must be supported by participants within a specific period of time, with a sanctions regime to apply if participants do not comply. However, if this approach is not sufficient the Bank will consider the merits of a regulatory solution to ensure that NPP functionality meets the evolving needs of users of the payments system. Having said that, the Bank recognises that NPPA has an ambitious development agenda that if fully implemented would likely address most of the functionality issues raised during the consultation. In addition, it should also be acknowledged that, despite the delays, there are now 80 institutions connected to the NPP and providing fast payment services to their customers and use of the platform is continuing to grow.

Stakeholders have identified a number of access issues that could present potential barriers for new participants, such as the current requirements that new participants are ADIs and must make a material capital contribution. A few stakeholders in the consultation argued that designation and an access regime imposed by the Payments System Board would be the best approach to manage these potential issues. In particular, they felt that it was essential that access to the NPP be managed independently of the direct participants who may have perceived or actual conflicts of interest. The Productivity Commission also recommended an access regime for the NPP in its 2018 report on Competition in the Australian Financial System. In contrast, NPPA, some of the NPP participants and some other stakeholders argued that the current access framework is working well, pointing in particular to the large number of entities that have indirectly connected as identified institutions. They would prefer that the NPP be given sufficient time to demonstrate that it promotes open access and competition in payments before an access regime is considered. They felt that the current risk-based framework strikes a balance between open access and protecting the security of the payments infrastructure and the data within it.

The Reserve Bank agrees that the access issues discussed in this report, if left unaddressed, could raise policy concerns. Accordingly, the Bank has made a number of recommendations for NPPA to take action in relation to requirements for participation in the NPP, the required capital contribution for participation and the governance arrangements involving the NPPA Board. The Bank considers that it is reasonable to give NPPA and its participants the opportunity to act on these recommendations before considering the imposition of specific regulation. The Bank will be monitoring progress on these recommendations closely and will continue to liaise with potential entrants to ensure that the operation of the NPP is consistent with the promotion of competition and efficiency in the payments system.

The Bank is requesting that NPPA provide a public written response to the recommendations in this report by end July 2019, explaining how it intends to implement the recommendations and over what time period. The Bank will then seek regular updates from NPPA on its progress in addressing the recommendations.

The Bank will, with the assistance of the ACCC, conduct another review of NPP functionality and access issues commencing no later than July 2021. This review could take place earlier if the Bank becomes aware of significant issues or concerns regarding NPP access or functionality. If the Bank assesses that there has been insufficient progress in addressing the recommendations made in this report, it will closely consider the case for regulation via an access regime or standards imposed on the NPP and its participants.

Abbreviations

ACCC	Australian Competition and Consumer Commission	FMI	Financial market infrastructure
ADI	Authorised deposit-taking institution	FPS	UK Faster Payments Service
AFS	Australian Financial Services	FSS	Fast Settlement Service
APCA	Australian Payments Clearing Association	IOSCO	International Organization of Securities Commissions
API	Application programming interface	ISO	International Organization for Standardization
APRA	Australian Prudential Regulation Authority	IT	Information technology
ASIC	Australian Securities and Investments Commission	MOU	Memorandum of understanding
ASL	Australian Settlements Limited	NPP	New Payments Platform
ATO	Australian Taxation Office	NPPA	NPP Australia Limited
AusPayNet	Australian Payments Network	PAYG	Pay as you go
BECS	Bulk Electronic Clearing System	PFMI	<i>Principles for Financial Market Infrastructures</i>
BI	Basic Infrastructure	RADI	Restricted authorised deposit-taking institution
BSB	Bank-State-Branch	RBA	Reserve Bank of Australia
CEO	Chief Executive Officer	RITS	Reserve Bank Information and Transfer System
CMS	Consent and mandate service	RTGS	Real-time gross settlement
CPMI	Committee on Payments and Market Infrastructures	SWIFT	Society for Worldwide Interbank Financial Telecommunication
ESA	Exchange Settlement Account		