

Box D

The New Payments Platform and Fast Settlement Service

The New Payments Platform (NPP) is a fast payment system, enabling virtually instantaneous payments on a 24/7 basis. It also offers a simpler way of addressing payments, using the recipient's email address, phone number or ABN rather than bank account details, and allows more information to be sent with the payment than in the legacy interbank electronic payment system. To facilitate these fast interbank payments through the NPP, the Reserve Bank built the Fast Settlement Service (FSS), a system that settles these payments between banks across accounts at the Reserve Bank in real time (that is, as they occur). The FSS is a new service of Australia's existing interbank settlement system, the Reserve Bank Information and Transfer System (RITS).

The NPP was developed by its 13 founding members (12 authorised deposit-taking institutions and the Reserve Bank) in response to gaps in the provision of retail payments in Australia. The gaps, identified by the Payments System Board's *Strategic Review of Innovation in the Payments System: Conclusions* in 2012, included the inability to make real-time payments outside normal banking hours and limited capacity to carry information about the payment. The NPP was designed to support the operation of 'overlay services' that utilise the data-carrying and fast payments capability of the NPP to deliver innovative and competitive payment services and products.¹ Together with current and future overlay services, the NPP has the potential to

improve the efficiency of the Australian payments system and increase productivity more broadly, including by better integrating payment services with other activities or business systems.

For the payments system as a whole, the NPP contributes to improved resilience by providing another means by which payments can be made. As well as being an alternative for other retail payment methods, the NPP can, if required, facilitate wholesale interbank payments.

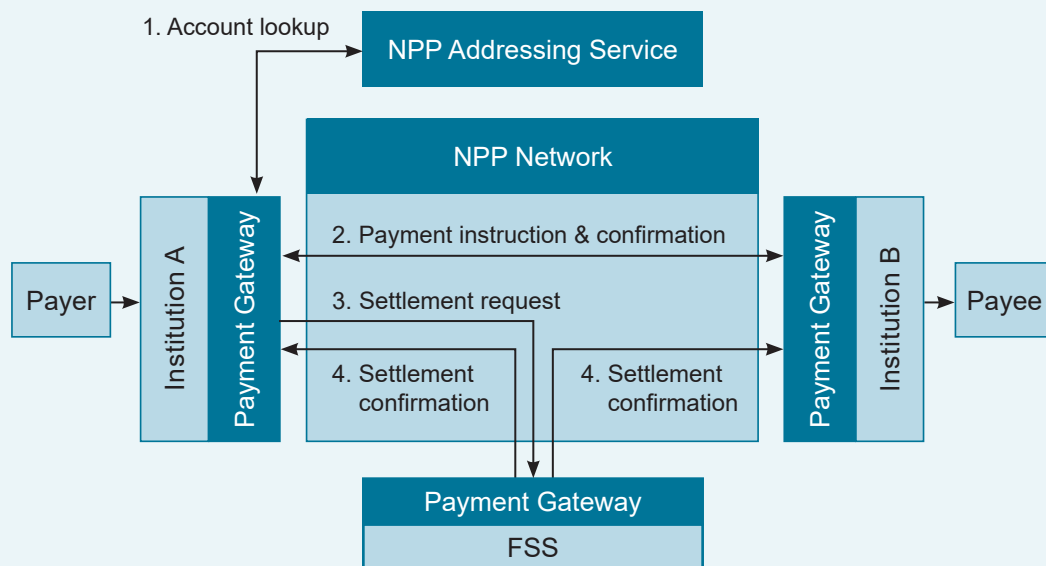
Given that the NPP is available to make payments at all times, both the NPP and FSS have been designed to meet high standards of resilience. The NPP and FSS also change the risk profile faced by participants in the Australian payments system, by reducing the likelihood of delays in receiving funds and increasing the importance of real-time behaviour monitoring in preventing financial crimes.

Resilience Features of the NPP and FSS

The NPP and FSS are completely new pieces of payments infrastructure (Figure D1). The NPP network, switching capability (enabled by payment gateways) and addressing service comprise an industry utility, NPP Australia Limited, owned by its shareholder participants. The addressing service enables customer accounts to be identified by an email address, phone number or ABN. The payment gateways are used by participating institutions to send messages with payment details and confirmation responses. The payment gateways also initiate settlement by sending a settlement request to the FSS.

¹ The first overlay service, Osko, was developed by BPAY. It allows customers of participating financial institutions to make payments in under a minute through their financial institutions' mobile or internet banking system.

Figure D1: Infrastructure and Payment Processing



Source: RBA

The FSS is capable of settling payments between financial institutions in under one second, which enables payments through the NPP to be made available to recipients within a minute or less, rather than taking hours or days as previously. The FSS also settles payments 24 hours per day, 7 days per week (a significant extension from previous settlement operating hours of weekdays between 7.30 am and 10.00 pm). The Reserve Bank's target for the availability of the FSS is 99.995 per cent, which equates to tolerating an average of two minutes of service downtime per month.

To achieve the high system availability and reliability, the FSS infrastructure and databases are duplicated across locations. The settlement service is able to be run independently from each location, and the active site is able to be switched to another location quickly. This set-up will allow for planned upgrades of hardware and software to occur with minimal downtime to the overall service, and will also help minimise

disruptions in a contingency event that affects the ability to operate from a particular site.

Support arrangements have been designed to align with a continuously operating system. In particular, Reserve Bank staff are available on a 24/7 basis to monitor the performance of the FSS system and provide help desk services to industry participants. Financial institutions are expected to manage their liquidity to allow for settlement of NPP payments on a 24/7 basis and monitor related reports. The Reserve Bank assists financial institutions with their liquidity management by providing automated system tools in RITS (including the FSS) and making liquidity available through its Standing Facilities (which enable eligible institutions to obtain funds from the Reserve Bank on pre-specified terms via intraday or open-dated repurchase agreements).²

² For more information on the Standing Facilities see: <<http://www.rba.gov.au/mkt-operations/dom-mkt-oper.html>>.

Risk Implications of Fast Payments

The speed at which NPP transactions occur and the immediacy of funds availability alter the risk profile of retail payments.

In the past, the interbank obligations that arise in retail payment systems have been settled on a net-deferred basis in RITS. Banks accumulated the payments made by their customers and, at set times during the day, the net amount of these obligations were transferred between banks. In contrast, NPP payments will be settled individually in real time, which mitigates the credit risks associated with delays to the settlement of funds. This will reduce risks for financial institutions since, unlike net-deferred settlement, NPP payment obligations cannot build up during the day between NPP participants. Immediate settlement also means that financial institutions can make funds available to recipients in real time without taking on credit risk. The speed with which funds can be made available to recipients also reduces the credit and liquidity risks faced by consumers and businesses. For example, a business could wait up to a few days to receive funds in their bank account if a customer were to pay for goods and services by card, cheque or bank transfer, whereas they will receive the funds almost immediately when a customer pays through the NPP. Over time, it is expected that some retail payments will transition to the NPP, particularly from the Direct Entry (DE) system, which includes internet 'pay anyone' bank transfers. Since DE payments account for almost 90 per cent of the value of retail payments, the transition of some of these to the NPP should also generate a significant reduction in settlement risks across the payments system overall.

Although settlement risks are mitigated by the real-time settlement of NPP transactions, financial institutions will need to consider

their liquidity management to meet payment obligations. Systems that settle payments on a gross basis intrinsically require greater liquidity than systems that settle on a net basis. However, it is not considered likely that participants in the payments system will need to hold significantly larger balances to facilitate their NPP payment obligations. The NPP is primarily a payment system for retail transactions, with individual transactions expected to be relatively low in value. Furthermore, wholesale interbank transactions have typically been settled individually and in real time in the past, so there will be a limited net impact on liquidity if some are made as NPP payments. Financial institutions also have access to funds through the Standing Facilities to help manage their liquidity and automated features have been built into RITS to help allocate liquidity as required between the settlement of NPP payments through the FSS or the settlement of other transactions in RITS.

Risks of fraud and misdirected payments are present in the NPP, as they are for any payments system, but real-time posting to customers' accounts means there is no delay for the recipient of a fraudulent payment to access the proceeds. Of particular focus in the financial industry is the need to have effective fraud controls in place for their customers, which can include real-time monitoring of customer payment patterns. A factor that should help reduce the incidence of fraud is that NPP payments can currently only be initiated by the payer; the payee is not able to initiate payment. If a completed payment is disputed, the payer's financial institution will have to contact the payee's institution to try to prevent the withdrawal of funds. In addition, the ability to address payments to an email address, phone number or ABN (rather than to a BSB and account number) and the subsequent confirmation of the name of the payee prior to the payment being processed, should reduce the

chance of a misdirected payment. To help reduce the risk of being affected by fraud, members of the general public should continue to be alert to scams and safeguard their personal and financial information. ✎