

Capab
deve

Mandated Payments Service

*Enabling third party payment initiation on
the NPP*

ability
elopment



30 April 2020

NPP AUSTRALIA LIMITED
ABN: 68 601 428 737

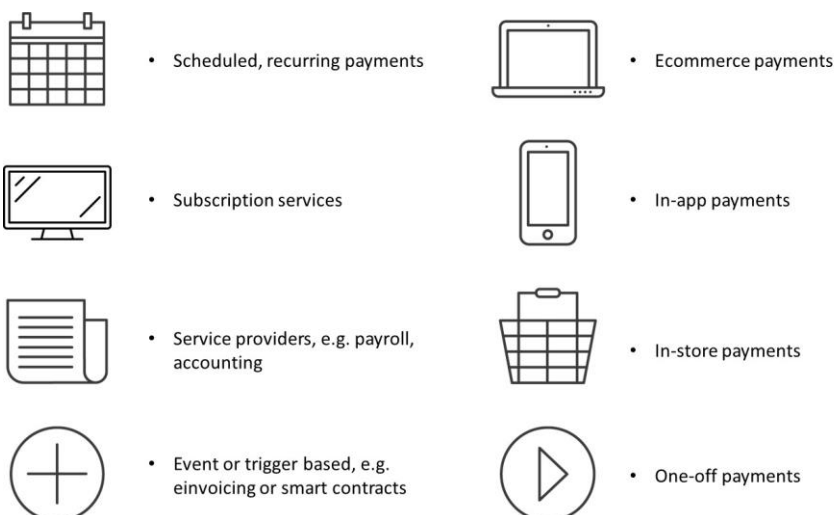


Since prior to the NPP going live in 2018, NPP Australia has worked extensively with the industry to develop the Mandated Payments Service¹ (MPS). This will be core foundational native capability, enabling customers to authorise third parties to initiate payments from their bank accounts² using the NPP. This capability, governed by a rules framework and liability model, will provide the Australian market with a broad, scalable approach to a third party payment initiation for real-time account-to-account payments.

Introduction to the Mandated Payments Service

The NPP currently supports credit payments or “push” payments whereby *customers themselves initiate* a payment from their account via their banking channel. With the Mandated Payments Service, NPP Australia is developing capability to enable customers to *authorise third parties to initiate* payments from their accounts via the NPP.

The MPS is native capability, which is flexible, extendable and which will support a broad range of use cases and different payment initiation scenarios:



Supported use cases range from a better alternative to current direct debit payments to merchant initiated ecommerce and in app payments, to ‘on behalf of’ payment services offered by third parties, e.g. a cloud accounting software provider authorised by a corporate banking customer to manage their finance functions such as payroll, and various fintech applications.




A standardised and consistent approach to third party payment initiation via the NPP, combined with a common process for establishing persistent customer authorisation, will maximise the utility of this capability and ensure that the MPS provides a broad, scalable and secure solution for account-based third party payment initiation in Australia.

¹ Mandated Payments Service is an industry working title. Work is currently underway to determine a market facing name and identity for the service

² As distinct from payments which may be initiated using card rails which are also attached to accounts

Key Features and Benefits







The MPS will deliver key features and benefits for authorised third parties using the service to initiate payments:

- | | |
|--|---|
|  <ul style="list-style-type: none"> • Real-time validation of customer's account at time of mandate creation |  <ul style="list-style-type: none"> • Receive notifications of changes to mandate status, e.g. if mandate is cancelled or suspended |
|  <ul style="list-style-type: none"> • Real-time funds availability check (at time of payment) |  <ul style="list-style-type: none"> • Centralised storage of mandate records |
|  <ul style="list-style-type: none"> • Real-time confirmation of payment |  <ul style="list-style-type: none"> • Data-rich capability with more data included in the payment message |
|  <ul style="list-style-type: none"> • Real-time response on payment instructions |  <ul style="list-style-type: none"> • Ability to support more seamless, digitised and efficient processes |

Experience from Europe suggests that payments initiated via real-time infrastructure are superior to those using batch infrastructure due to the real-time confirmation of funds availability and confirmation of payment, which enables third parties to deliver services immediately (for example dispatching goods in an ecommerce scenario or delivering services subject to an ongoing subscription).

From a customer perspective, the MPS enables a more digital and enhanced experience with customers able to digitally authorise, view, modify and manage the mandates they have given for third parties to initiate payments from their bank account. Customers will also be able to more easily move their mandate payment arrangements from one bank account to another account at a different financial institution. This functionality increases the visibility and control that customers have over these various payment arrangements, resolving a significant pain point associated with these kinds of payment arrangements today.

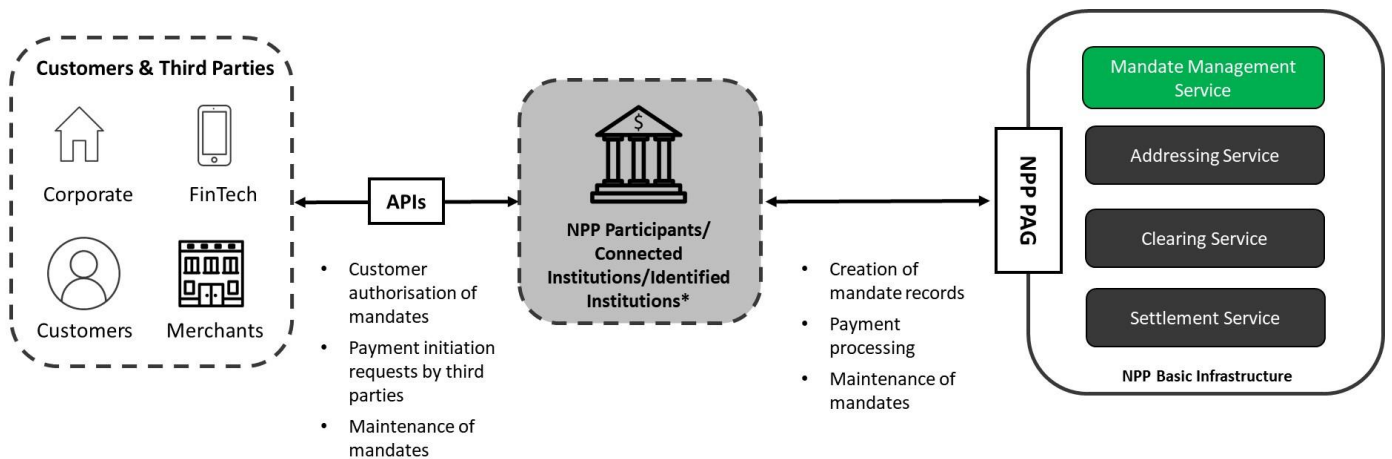
Customer benefits:

- | | |
|--|---|
|  <ul style="list-style-type: none"> • Customers have greater visibility over their mandate payment arrangements linked to their account |  <ul style="list-style-type: none"> • Greater ability to move mandate payment arrangements linked to their account to an account held at another bank |
|  <ul style="list-style-type: none"> • Customers have more control over their account and can more easily perform mandate maintenance functions, e.g. cancel a mandate |  <ul style="list-style-type: none"> • Provide a more digital, user friendly customer experience |
|  <ul style="list-style-type: none"> • Option for customers to use PayID when setting up mandate arrangements on their account rather than using their BSB and account number |  <ul style="list-style-type: none"> • Banks can choose to optionally deliver additional notifications to customer regarding their upcoming payments |

How the MPS works

The MPS consists of:

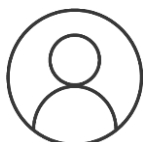
- Payment initiation message capability used by third parties to request payments from a customer’s bank account. Those payment requests are associated with a customer authorised payment arrangement, a ‘mandate’
- A centralised database for creating, storing and maintaining mandate records (the Mandate Management Service), which is owned and operated by NPP Australia
- Associated business rules (which provides assurance that the payment initiation messages will be acted upon by the financial institution where the customer’s bank account is held and rules regarding risk and liability)



* If offering MPS services

Customer authorisation is at the core of the MPS

Third party payment initiation can be supported in a safe and secure manner using the MPS because the customer provides explicit authorisation for payments to be processed from their bank account. This authorisation is captured in the creation of a digital payment arrangement or a ‘mandate’ which serves as a record of the customer’s authorisation (or consent) for payments to be initiated from their account by a specified third party, in advance of any payments being processed.



- A customer’s explicit authorisation is required for any payments to be initiated on their account by a third party
- Performing authorisation within a customer’s banking channel benefits from the bank’s secure authentication practices which are already in place today
- A record of the customer’s authorisation (a ‘mandate’) is created and stored centrally, with both the customer’s bank and the payment initiator’s bank able to retrieve and view the mandate record
- The agreed payment terms are included in the mandate record, such as the name of the customer, their bank account details, payment initiator details, creditor details (optional) and the frequency and amount of the payments that the customer has pre-authorised

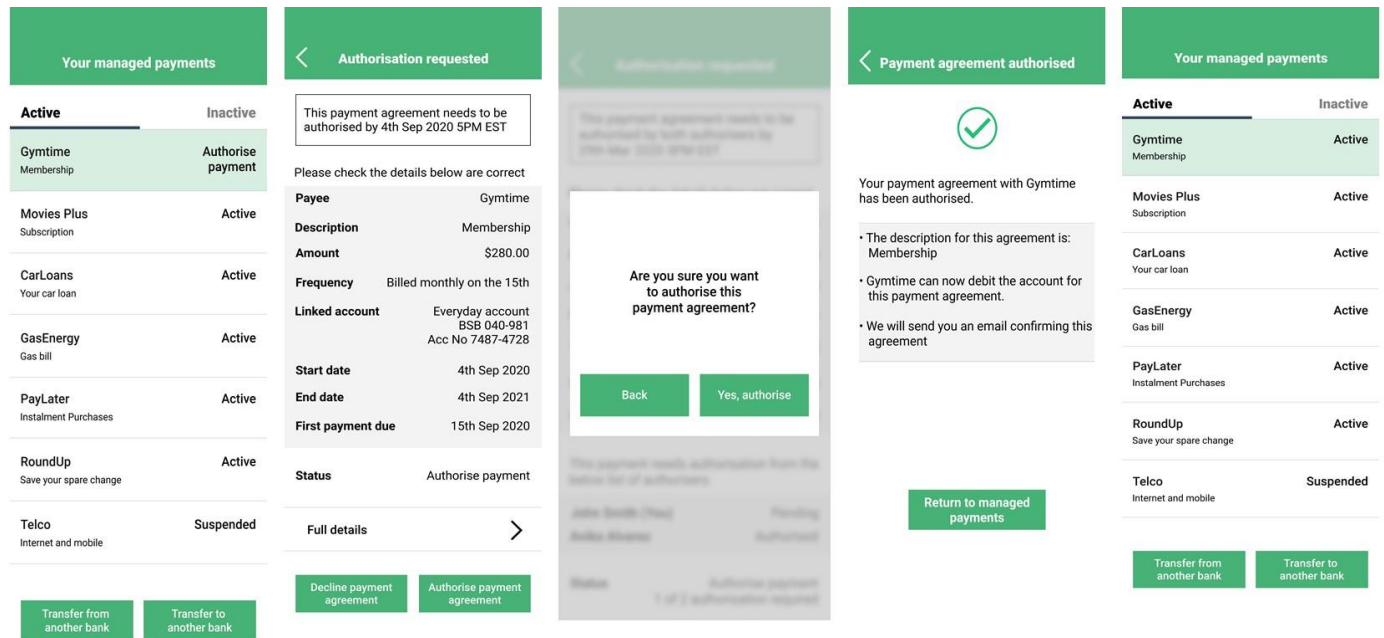
NPP Australia is developing customer experience requirements and guidelines for the relevant customer related MPS processes, and in particular the mandate authorisation (or consent) process. As far as possible, the intention (where relevant) is to align this guidance with the standards and requirements developed for customer consent for data sharing



under the initial implementation of the Consumer Data Right.

The diagram below illustrates the proposed customer authorisation process for creating new mandates:

Illustrative



The customer can see mandates pending authorisation in their online banking app.

When the customer views the mandate details they are presented with the option to authorise or decline the mandate.

When the customer chooses to authorise the mandate they are presented with a final confirmation step.

When the customer authorises the mandate they are shown the outcomes.

The customer can view the updated status of their mandates.

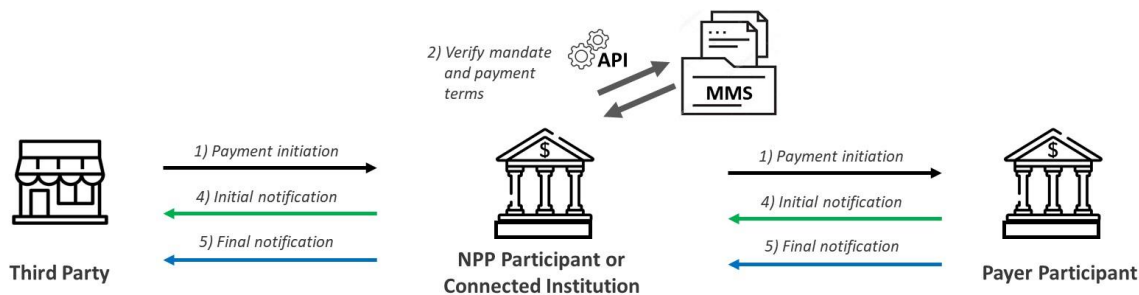
Mandate records offer considerable flexibility with a range of available data fields. In addition to the mandatory data fields within the mandate record, optional data fields can be populated depending on the needs of the customer and the third party payment initiator. Use of the optional fields offer parties the ability to include and display data that more accurately describes the terms of the customer’s authorisation including, for example, payment type (recurring, one-off or ad hoc), any ultimate creditor’s name, descriptions and creditor’s reference/s.

The format of MPS mandate records, payment initiation messages and NPP payment messages offers significant benefits in terms of data quality and visibility, compared to the relatively opaque nature of direct debit arrangements established under the BECS Direct Entry system, particularly if the payment is being facilitated via an intermediary.

Once a mandate has been created and authorised by the customer, the relevant third party, either via their financial institution or an NPP Connected Institution, can request a payment initiation message to be sent to the customer’s bank to process payments from the customer’s account, as illustrated on the next page.



Payment initiation processing:



1) Third party, either via their financial institution or a Connected Institution, can request a payment initiation message to be sent to the customer’s bank to process payments from the customer’s account

2) The financial institution or Connected Institution sending the payment initiation request must verify that the mandate record is valid and that the payment being requested is within the specified terms of the mandate
 3) Once this has been completed, the payment initiation request is sent to the customer’s bank

4) Customer’s bank (the Payer Participant), sends an initial notification that the payment request has been accepted or rejected (with a reason in the event of the request being rejected). This notification is passed through to the third party initiating the payment
 5) A final notification is then sent to indicate the outcome of the payment, which is passed through to the third party initiating the payment

In the event that the payment is not successful, there will be a process and rules in place for third parties to retry payment initiation.

Both customers and authorised third party payment initiators will be able to perform a number of functions to ensure their mandates are appropriately managed, kept up to date and are accurate. Mandate maintenance functions include being able to:



Amend

- Once a mandate is created, amendments can be made to certain mandate information. Depending on the type of amendment made, further authorisation may be required by the customer.



Suspend

- Mandates can be suspended resulting in any associated payments being paused. A suspended mandate can be activated again by the party who suspended it.



Cancel

- Mandates can be cancelled at any time. Once cancelled, a mandate cannot be used to initiate payments



Transfer

- Mandates can be moved from an account held at one bank to another account at a different bank. Transferring mandates does not change the payment terms.

The MPS is governed by an overarching rules framework established by NPP Australia which will define, amongst other things:

- Operational procedures for processing payment initiation requests associated with mandates which must be followed by all participating financial institutions (including payment initiation requests that have been sent indirectly via another NPP access point)
- The customer facilities that participating financial institutions must provide to support customer authorisation and to enable customers to view their mandates and give instructions to amend, suspend, resume and cancel mandates
- Recovery processes for error payments and mistaken payments, and the liability framework associated with unauthorised payment initiation requests
- Participation rules and criteria for different parties accessing the MPS (including new access options not currently available for credit or “push” payments)



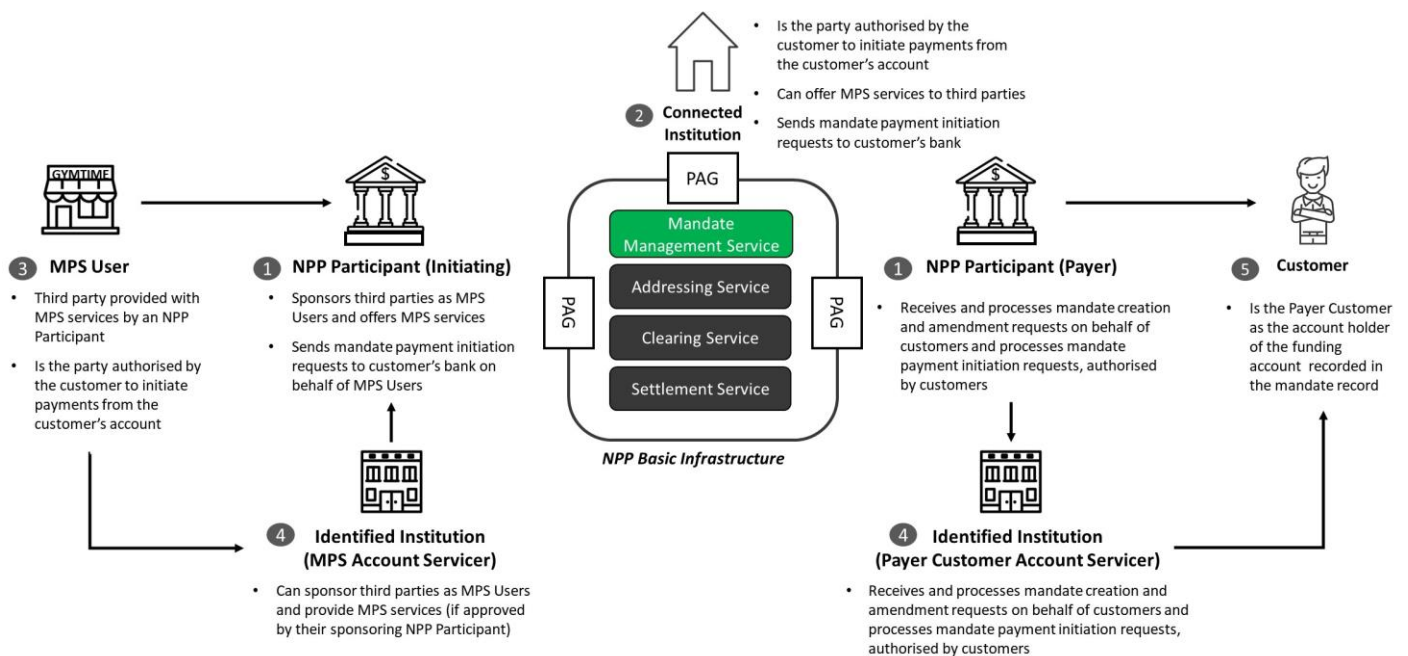
The NPP, as payments infrastructure in operation today, provides the mechanism for the secure and safe exchange of data between authorised parties using established, rigorous and robust security and authentication protocols.

The MPS leverages the existing features and protections built into the NPP that apply to clearing and settlement messages being exchanged by NPP Participants today, specifically fraud prevention, liability and risk management processes. The MPS capability will further build upon these existing fraud controls and fraud prevention processes, thereby simplifying the management of issues concerning fraud and unauthorised payments.

The use cases at the end of this document illustrate how the MPS could be used in various ways by authorised third parties to initiate payments from a customer's account.

Accessing the MPS

Different parties involved in the MPS have certain roles and responsibilities, as illustrated in the diagram below:



NPP Participants and Connected Institutions can interact directly with the Mandate Management Service to create and manage mandate records established for customers. All other entities interact with the Mandate Management Service indirectly via either an NPP Participant or an NPP Connected Institution.

Access options for Third Parties

Authorised third parties, such as merchants, billers and payment service providers, who want to initiate payments from customers' accounts can do so in a number of ways, either directly or indirectly:

- As an MPS User, sponsored by either an NPP Participant or Identified Institution, using the MPS service to request payments associated with customer mandates (similar to the concept of a BECS Debit User today)
- As a Connected Institution in their own right (if they meet the applicable criteria)
- As an Identified Institution who is sponsored by an NPP Participant and authorised to offer MPS services
- As a client of a Connected Institution who can request payments associated with mandates to which they are a party



A key feature of the MPS is that third parties that want to initiate payments only require *one* access point to the NPP infrastructure. This one access point enables them to initiate payments, with the customer’s authorisation, from any one of the 67 million (and growing) NPP enabled accounts. This is an important difference from other markets, such as the UK, which have introduced third party payment initiation (or ‘write access’ under Open Banking) which requires third parties to integrate with multiple financial institutions in order to initiate payments from customers’ accounts.

The eligibility criteria for these options is summarised below and shown in comparison to the eligibility criteria for NPP Participants:

	NPP Participant	MPS User	Connected Institution	Identified Institution	Client of Connected Institution
Required to be a Shareholder of NPPA	✓	✗	✗	✗	✗
Licensed by APRA as an ADI (or RADl)	✓	✗	✗	✗	✗
Hold an RBA Exchange Settlement Account	✓	✗	✗	✗	✗
Connect via own NPP payment gateway	✓	✗	✓	✗	✗
Connect via third-party NPP payment gateway	✓	✓	✗	✓	✓
Able to offer MPS Services	✓	✗	✓	✓	✗

These four options are further explained below.

I. MPS User

The diagram illustrates the flow of an MPS User (represented by a 'GYMTIME' logo) interacting with an NPP Participant (Initiating) and an Identified Institution. The NPP Participant connects to the NPP Basic Infrastructure (PAG), which includes services like Mandate Management Service, Addressing Service, Clearing Service, and Settlement Service.

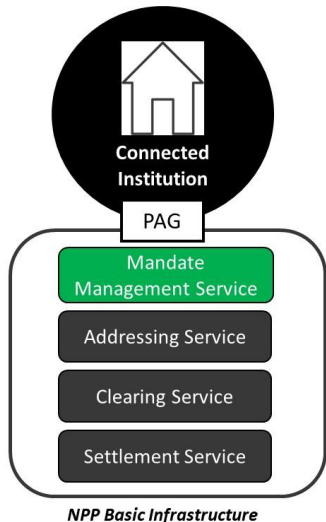
An MPS User can be:

- A creditor, such as a merchant or biller, who wants to offer MPS services to their customers. For example, a merchant who wants to set up mandates with their customers so they can request regular recurring payments to be paid into their account
- A service provider, for example, an organisation providing payment services to a merchant who manages customer mandates and payments for that merchant

MPS Users are sponsored by a financial institution offering MPS services (this could be either an NPP Participant or an Identified Institution). This could be, but is not limited to, the financial institution that they hold their own bank account with. The terms under which an MPS User is sponsored to use the MPS are subject to proprietary commercial arrangements agreed between the sponsoring financial institution and the MPS User.

MPS Users gain access to MPS services through a proprietary channel or service (such as APIs) provided by their sponsoring NPP Participant or Identified Institution.

II. Connected Institution



A Connected Institution connects to the NPP infrastructure directly by installing an NPP payment gateway in their own environment and can send payment initiation and other non-value messages.

A Connected Institution is entitled to offer MPS services to their clients which include:

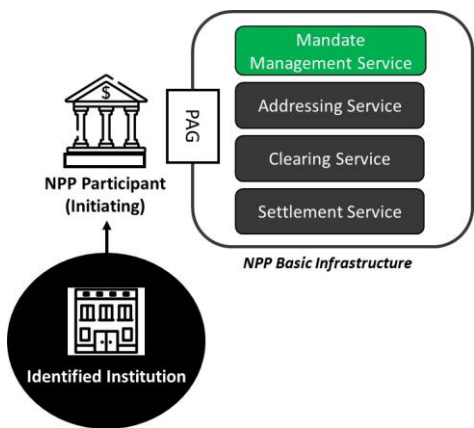
- Creating mandate records for authorisation by customers
- Sending payment initiation requests which have been authorised by the customer to the customer’s bank for processing (payments can be initiated from a customer’s bank account to a payee’s account held at another financial institution)
- Mandate maintenance functions

A Connected Institution who uses the MPS must comply with the obligations and rules relating to accessing and using the Mandate Management Service and the payment initiation service

Given a Connected Institution is directly connected to the NPP, there are certain technical requirements in becoming a Connected Institution including resilience, 24/7 availability, security and ability to meet performance, availability and resiliency SLAs. Any organisation who is legally authorised to operate in Australia, is financially solvent and can meet the NPP technical connectivity requirements and other applicable criteria could become an NPP Connected Institution. As Connected Institutions are not involved in the clearing and settlement of NPP payment messages and they do not themselves hold funding accounts, a Connected Institution does not need to be an ADI.

NPP Australia will explore opportunities to align requirements for Connected Institutions with ACCC accreditation for the CDR.

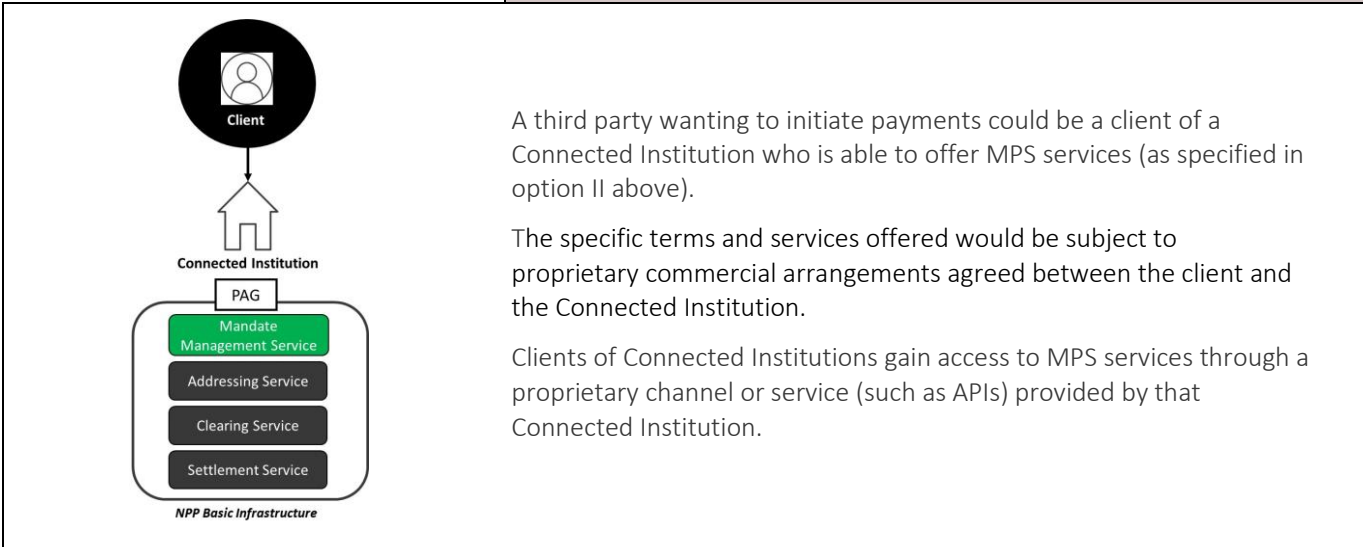
III. Identified Institution



A third party could be an Identified Institution in order to offer MPS services to other organisations (if approved to do so by their sponsoring NPP Participant).

Identified Institutions connect to the NPP indirectly via a directly connected NPP Participant. A commercial arrangement is required between the NPP Participant acting as the sponsoring direct connector and the organisation seeking indirect access as an Identified Institution. Being an ADI is not one of the eligibility requirements.

IV. Client of a Connected Institution



A third party wanting to initiate payments could be a client of a Connected Institution who is able to offer MPS services (as specified in option II above).

The specific terms and services offered would be subject to proprietary commercial arrangements agreed between the client and the Connected Institution.

Clients of Connected Institutions gain access to MPS services through a proprietary channel or service (such as APIs) provided by that Connected Institution.

Which access option is most appropriate for individual organisations will largely be determined by what their business objectives are and other relevant commercial considerations, for example:

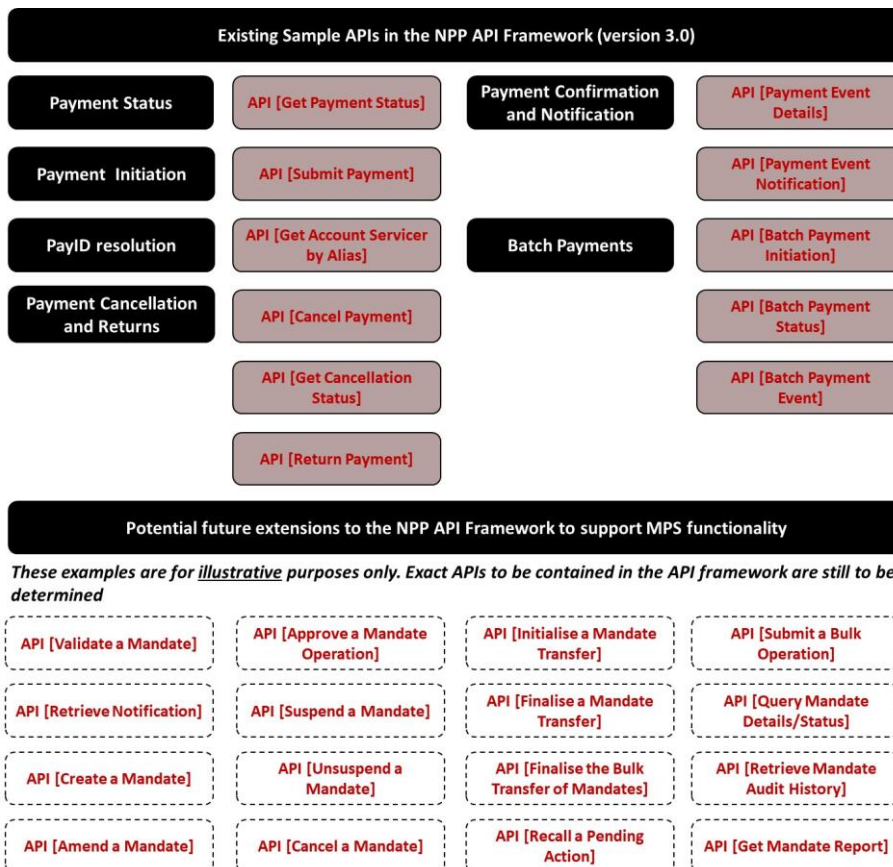
Business objective	Commercial considerations	Most appropriate access option(s) for MPS
<p>"I want to be able to receive payments from my customers on a regular basis, e.g. for monthly bills"</p> <p>"I want to be able to request payments from my customer's accounts, e.g. to fund their use of my digital wallet"</p>	<p>"Do my transaction volumes warrant connecting directly?"</p> <p>No →</p> <p>Yes →</p>	<ul style="list-style-type: none"> MPS User Client of Connected Institution Connected Institution
	<p>"Do my transaction volumes warrant connecting directly?"</p> <p>No →</p> <p>Yes →</p>	<ul style="list-style-type: none"> Identified Institution Connected Institution

Payment initiation messages, which are essentially only *instructions* for a payment to be made, are inherently less risky than a payment clearing message, which entails the *actual* movement of money. Payment initiation messages only result in the movement of funds when they are acted upon by an NPP Participant, which as an ADI, is a regulated entity. Third parties that want to use the NPP to initiate payments using the MPS are likely to have a range of different access options, some of which are similar to how existing payment services work today, but with additional risk controls. Indeed, the concept of an MPS User being sponsored to use the MPS is very similar in concept to a BECS Debit User when using the BECS system for payments to be processed. We anticipate that there will be a more competitive market for submitting payment initiation messages, including direct connection options that do not require an ADI licence as outlined above.

Payment initiation messages are likely to be submitted in a range of formats, including real-time via API, ISO message format and possibly in batch form. The specific options for integration and submitting payment initiation requests is determined between the third party and the organisation providing access to the NPP and MPS services.

Extending API capabilities

APIs play an important role in supporting third parties wanting to use the NPP’s capabilities. In 2018, NPP Australia released its API Framework which defines the key technical approach and mandatory data attributes for NPP APIs, aligned to ISO 20022 standards, including sample RESTful APIs in JSON format³. This API framework is intended to drive inter-operability, standardisation, and consistency in the development of NPP APIs and how they can be used by third parties to interact with the NPP. To support the delivery of the MPS capability, NPP Australia will be extending the NPP API framework to include sample APIs related to MPS functions:



In further enhancing and extending the NPP API framework, NPP Australia will, where relevant, look at opportunities to align the NPP API framework to the CDR API framework, for example reviewing the opportunity to leverage the CDR API security framework.



In March 2020, in collaboration with SWIFT, NPP Australia launched a new dynamic version of the NPP API sandbox, introducing additional features and capabilities to meet the evolving needs of the expanding NPP ecosystem.

Now located in the cloud-based NPPA Developer Portal, the sandbox provides third parties with access to an independent environment where they can build and test their NPP-based prototypes and solutions, using the NPP API Framework and sample RESTful APIs in JSON format. The sandbox currently has more than 100 registered users.

³ See <https://www.nppa.com.au/the-platform/api-framework-and-sandbox/>



The NPP sandbox will also be updated to include the sample APIs that support MPS functions, enabling third parties to test these APIs in a sandbox environment.

NPP participating financial institutions are increasingly making APIs available in the market for use by third parties (NPP Australia itself is not exposing APIs for use on the NPP). Over time, these APIs will become more widely available (and most participating financial institutions have provided indications to NPP Australia that they expect to adhere to the NPP API framework when developing their APIs, suggesting a degree of consistency in how these APIs are developed). Greater availability of Participant NPP APIs will provide more fintechs, corporates and businesses with the ability to utilise the NPP and its capabilities.

Timelines

It is mandatory for all NPP participating financial institutions to implement technical and operational processes to support authorisation of mandates by their customers and MPS payment processing by 3 December 2021. Specifically, they need to be able to:

- Seek a customer's instruction to authorise (or decline) the creation of a new mandate or an amendment to an existing mandate
- Provide a facility to enable a customer to view their mandates and give instructions to amend, suspend, resume and cancel mandates and promptly give effect to those instructions
- Receive and process mandate payment initiation requests

It is anticipated that financial institutions will begin to rollout MPS services, including services to authorised third parties, in early 2022. This is the current scheduled date for delivery, however it must be viewed in the context of uncertainty caused by COVID-19.

Summary

In summary, the Mandated Payments Service capability that is being developed by NPP Australia will support real-time, customer authorised, third party payment initiation from bank accounts:

- Third parties who wish to initiate payments from a customer's account can submit payment initiation messages via one NPP access point and reach all NPP enabled accounts; they do not require arrangements with multiple financial institutions.
- A range of access options exist for third parties, who can choose the most appropriate access route for their business needs – submitting payment initiation requests via an NPP Participant as an MPS User; directly as a Connected Institution, indirectly as an Identified Institution or as a client of a Connected Institution
- The NPP provides a framework and infrastructure for third parties to initiate payments on a safe and secure system, which is in operation today, in a standardised and consistent manner

NPP Australia will make more information available as the development of this capability progresses.



About New Payments Platform Australia (NPPA)

Utility payments infrastructure

Operating as non-profit maximising utility payments infrastructure, the NPP is owned by 13 shareholders⁴ (both large and small financial institutions and including the Reserve Bank of Australia) for and on behalf of the Australian payments industry. NPP Australia is a public company established to oversee the operation of the NPP.

Open access philosophy

NPP's access framework has a range of access options, balancing broad participation while maintaining safeguards needed for a real-time payment system, and ensuring the ongoing protection of consumers.

As of April 2020, there are 90 connected organisations: 10 directly and 80 indirectly. A number of specialist wholesale payment service providers, banks, and non-ADI fintechs provide access to third parties - and this is only likely to increase with the introduction of the MPS. Availability of APIs is increasing, which will further support NPP access.

Operates on a cost recovery basis

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

NPP Australia governance

The NPP Australia Board has 12 voting Directors including three independent Directors and the Reserve Bank of Australia. Each Director has one vote – and collectively the Directors appointed by the four major banks have only one-third of the votes. Decisions regarding access, pricing and other governance related matters are determined by the independent Directors and NPP Australia management.

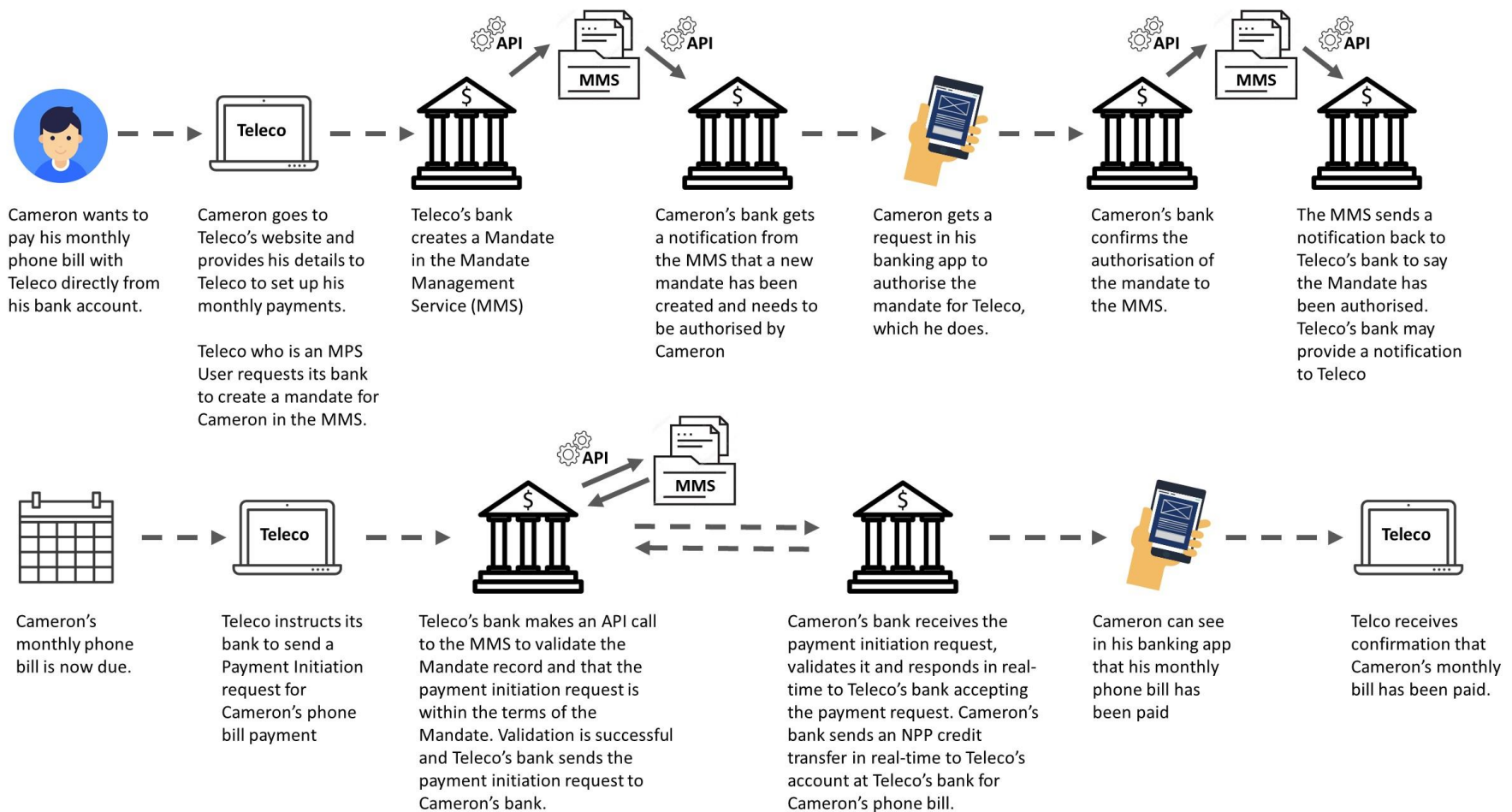
For further information, please visit www.nppa.com.au or email info@nppa.com.au

⁴ Current shareholders: Australia and New Zealand Banking Corporation, Australian Settlements Limited, Bendigo and Adelaide Bank Limited, Citigroup Pty Ltd, Commonwealth Bank of Australia, Cuscal Limited, HSBC Bank Australia Limited, Indue Limited, ING Australia, Macquarie Bank Limited, National Australia Bank Limited, Reserve Bank of Australia and Westpac Banking Corporation.

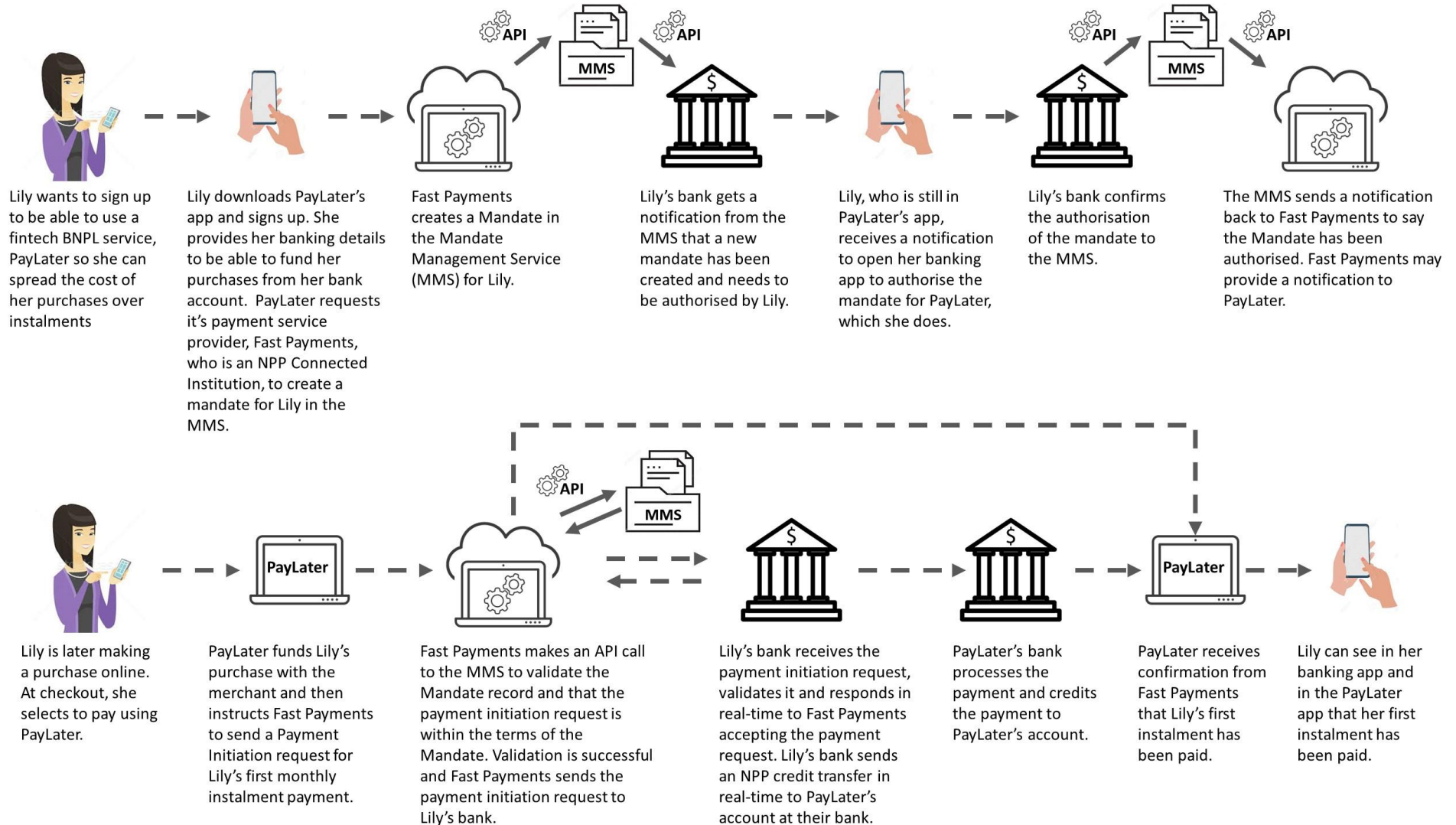
Illustrating different applications of the MPS

The following use cases illustrate how the MPS could be used in various ways by authorised third parties to initiate payments.

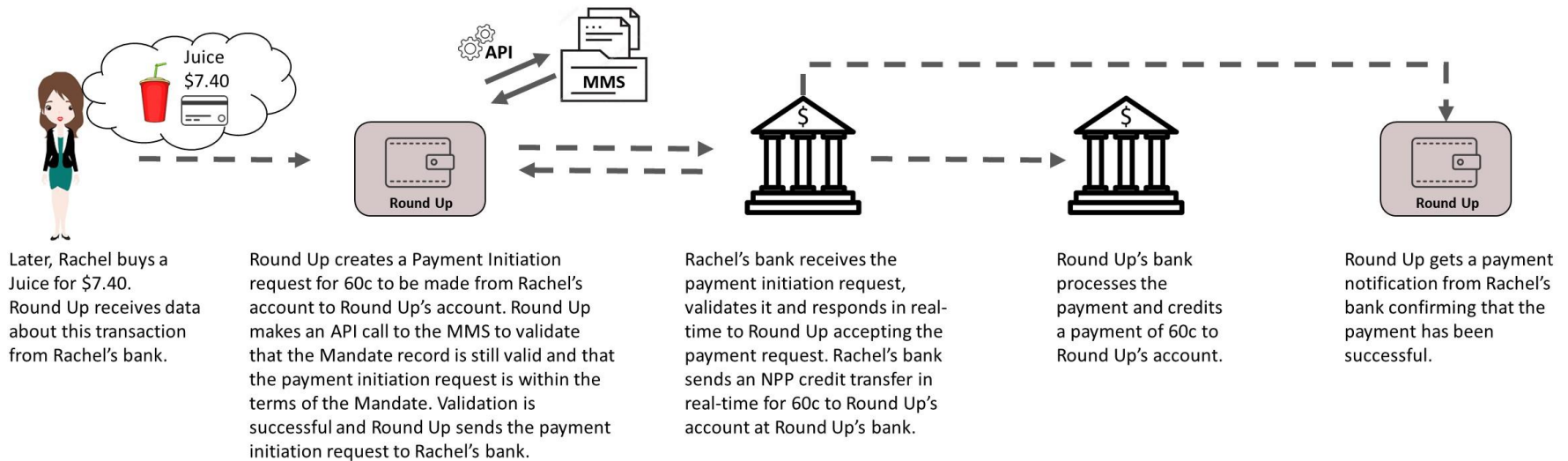
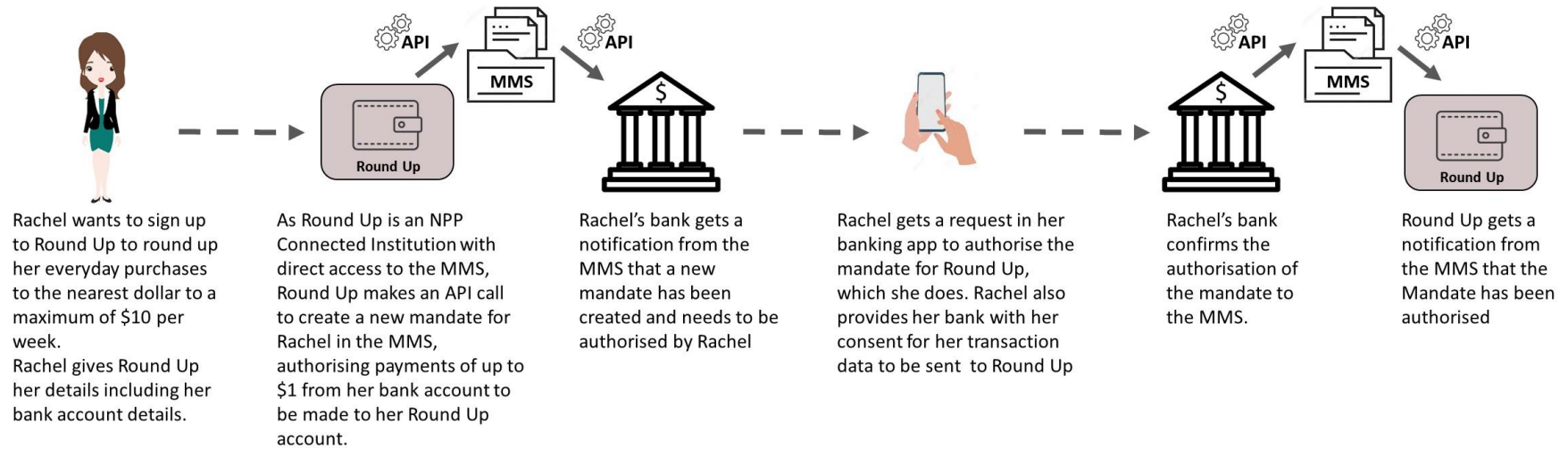
Use case 1 - Teleco, a phone company offers its customers the option to pay their phone bills directly from their bank account using the NPP Mandated Payments Service.



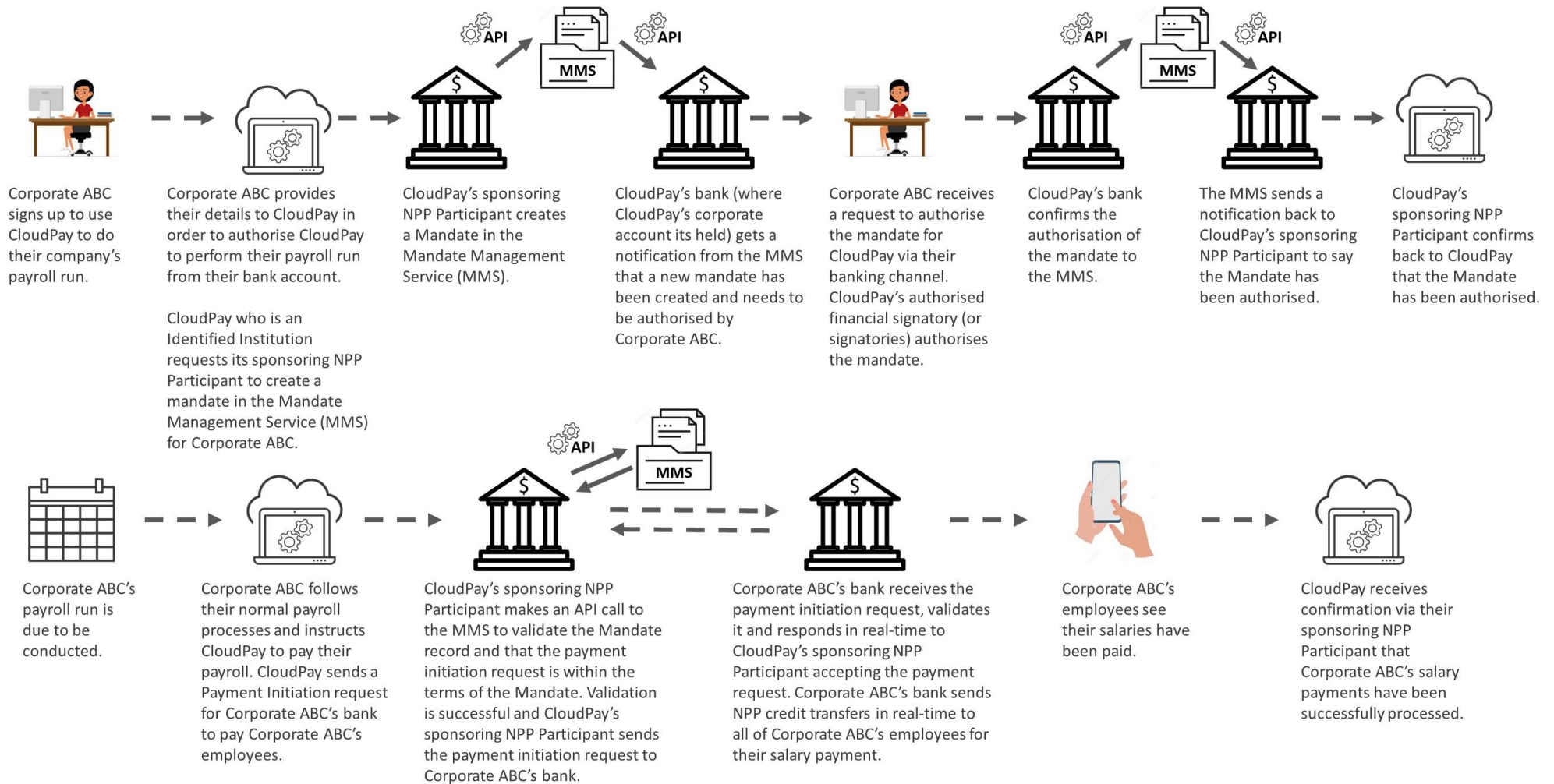
Use case 2 - PayLater is a Buy Now Pay Later payments solution that enables customers to pay for purchases in monthly instalments.



Use case 3 - Round Up operates a savings investment app that rounds up customer's everyday purchases to the nearest dollar and invests the additional funds in a separate account. As an NPP Connected Institution, Round Up can initiate payment initiation requests on behalf of customers who have signed up to their service.



Use case 4 - Corporate ABC wants to use CloudPay, a payroll software provider, to manage their corporate payroll for paying their employees. CloudPay is connected indirectly to the NPP as an Identified Institution.



ability
development

Capab
deve

30 April 2020

NPP AUSTRALIA LIMITED
ABN: 68 601 428 737