# Strategic Review of Innovation in the Payments System

## Real-Time Payments Committee
## Proposed Way Forward

## Contact

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## Publication

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8 February 2013

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Payments System Board

Governor
Reserve Bank of Australia

Dr Malcolm Edey
Deputy Chairman
Payments System Board

Assistant Governor (Financial System)
Reserve Bank of Australia

65 Martin Place
SYDNEY NSW 2000

Dear Governor Stevens and Dr Edey,

**Real Time Payments – An industry proposal**

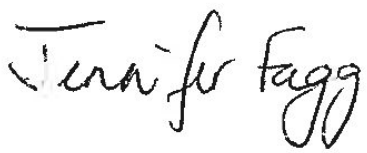
On behalf of the eight organisations listed on the next page, I am pleased to submit to the Payments System Board the attached revised proposal for developing real-time payments infrastructure in Australia. It replaces an earlier version submitted on 24 December 2012.

This proposal is the result of deliberations of the Real-Time Payments Committee, formed by the Board of the Australian Payments Clearing Association in September 2012, and has had the benefit of detailed discussion with executives of the Reserve Bank.

Pronouncements of the Payments System Board on innovation in the payments system provided the catalyst for this proposal. Nevertheless, the wholehearted engagement of organisations represented around the Committee table shows there is clear commitment to ongoing systemic reform of payments to meet the future needs of the Australian community. There is also recognition that this can only be achieved by sustained collaboration amongst Australian financial institutions.

The members of the Committee look forward to working with members of the Board, and with officers of the Reserve Bank, on improving the Australian payments system.

Yours sincerely,



Dr Jennifer Fagg
CHAIRMAN

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# 1. Introduction

The Real-Time Payments Committee was formed in September 2012 to develop a clear way forward for the Australian payments industry on real-time, low value payments.

The catalyst for action was the publication in June 2012 of the Payments System Board's *Strategic Review of Innovation in the Payments System; Conclusions* (Conclusions Paper). In the Conclusions Paper, the Payments System Board (PSB) sets out strategic objectives for the development of Australian real-time low value payments. The Committee is committed to working with the Reserve Bank of Australia (RBA) and the Australian payments industry participants on payment system evolution.

## 1.1. The initial strategic objectives

The initial strategic objectives established by the PSB and addressed in this proposal are:

- There should be the capacity for businesses and consumers to make payments in real-time, with close to immediate funds availability to the recipient, by the end of 2016.
- There should be the ability to make and receive low-value payments outside normal banking hours by the end of 2016. This would include availability of any real-time system.[1]
- Businesses and consumers should have the capacity to send more complete remittance information with payments by the end of 2016.
- A system for more easily addressing retail payments to any recipient should be available. To the extent that this is provided by a new real-time system, it should be available by the end of 2017. This does not rule out earlier availability via other solutions.

## 1.2. The Core Criteria

On 22 November 2012, the RBA published a set of Core Criteria against which the Payments System Board will assess proposals for provision of real-time payments. There are Core Criteria relating to the required system functionality *(S1-S15)*, governance of the programme to develop the new system *(G1-G10)* and the ongoing operation of the system once it is established *(O1-O7).* The Committee accepts and adopts the Core Criteria and seeks to respond comprehensively to the Core Criteria in this proposal. References to relevant Core Criteria appear in *(brackets)* throughout the text.

## 1.3. Scope of the Proposal

This proposal is designed to address the initial strategic objectives listed in Section 1.1 above, and the Core Criteria in full. The proposal does not include the industry work to be undertaken in relation to enhancements to the Direct Entry system, including same day settlement of Direct Entry payments. It also does not include industry and RBA work in relation to enhanced liaison arrangements, as proposed in the Conclusions Paper.

[1] The "out of hours" objective in the Conclusions Paper also refers to direct entry and card payments, which are beyond the scope of this proposal. The RBA recently published its decision to omit from the strategic objective the requirement for low-value payments to be made and received via the direct entry system outside normal business hours (and to review this once a faster payments solution is operational).

# 2. PSB and Industry Liaison

The governance arrangements for the Real-Time Payments (RTP) Programme will require extensive, ongoing liaison amongst industry, the RBA and the PSB. The Committee envisages that a Programme Steering Committee will coordinate this liaison *(G6)*. This is discussed further in Section 6.1.

As a first step and as a commitment to openness, once the PSB accepts this proposal the Committee intends to publish it in full on the APCA website. The RTP Programme also contemplates the early establishment of a Memorandum of Understanding and a Stakeholder Group open to all ADIs (see Sections 6.1 and 6.3).

The PSB has proposed the development of a new industry body or "Payments Council". As this proposal develops, industry liaison arrangements may need to be reviewed.

# 3. Industry Preferred Business Architecture

## 3.1. Environmental assumptions

In developing its proposal the Committee had regard to analysis and expert opinion on likely future user needs for real-time payments, and on the possible evolution of markets for payment services. Two key assumptions arise:

- There will be a wide diversity of user need for real-time payments. It is likely that future payment systems will provide a real-time experience for end users. Beyond this the needs of particular communities, and particular contexts, are becoming more bespoke and tailored as technology and social networking allow many different kinds of transactions to become automated and remote.
- Payment systems, schemes and services will themselves become more diverse and more competitive over time. Basic utility services like the cheque clearing system are already being replaced by a range of alternatives tailored to particular needs. A corollary is that payment systems and schemes are becoming more commercial and competitively oriented.

These two assumptions underpin the preferred business architecture.

## 3.2. Separating infrastructure and services

Any new payment system developed through industry collaboration should maximise economies of scale and beneficial network effects. These come from having nearly all payment users accessing the same underlying infrastructure. However, it should also establish the market environment for diverse payment schemes and services to evolve over time and competitively address the changing needs of many different end users.

In order to maximise prospects of meeting these important but competing objectives, the Committee proposes a layered solution consisting of:

- **Basic infrastructure**[2] comprising a clearing utility[3] and linked RBA real-time settlement, which provides the capability to meet the Core Criteria, connect all ADIs, enable fast, flexible payments messaging and allow for the future development of tailored overlay payment services using the infrastructure; **plus**
- **Overlay Services** that use the basic infrastructure through standardised access arrangements to offer payment schemes and services tailored to particular contexts, and particular types of customers. The Committee anticipates that multiple overlay services will develop over time, and may be commercial and competitive in nature. However, to promote early take-up and use of the basic infrastructure, the Committee proposes to encourage the development of an initial "convenience" service as the first overlay service. This will use the basic infrastructure to enable ADIs to offer an attractive, fast consumer payments service to their customers. Other approved schemes, hubs and services[4] that wish to use the basic infrastructure could do so on an equivalent basis to the initial convenience service and it is expected these will evolve independently in the future.

[2] The basic infrastructure consists of the clearing functions collaboratively developed, owned and operated to provide for the RBA's Core Criteria, including links to the RBA's settlement hub.
[3] The clearing utility is a part of the basic infrastructure and supplies all the required clearing services including communication, switch and addressing services.
[4] Other approved schemes, hubs and services would join the basic infrastructure as an overlay service – see 3.5.5. for more detail about overlay services.

The basic infrastructure should enable any ADI to offer a real-time payment service to its customers, relying on other ADIs to connect to the clearing utility and process valid messages in accordance with its rules. An ADI can choose to join an overlay service in order to provide different or additional services to its customers, but would not need to do so in order to use the basic infrastructure.

### 3.2.1. Policy rationale for separating infrastructure and services

The basic infrastructure will focus on inter-ADI activity, leaving maximum scope for diverse end user services to develop over and around it. It will not include rules about the way in which ADIs provide commercial services to their customers, or compel ADIs to provide any particular service to their customers.

The Committee believes the layered approach of the basic infrastructure plus overlay services (including the initial convenience service) is a more efficient and effective way to deliver real-time payments in Australia than a single integrated fast payments service.

The Committee agrees with RBA that open access to very fast processing infrastructure is needed to support real-time payments and that the industry should build this collaboratively, and centrally, to minimise cost and risk. The infrastructure will need to impose tight turnaround times on ADIs for message processing.

However, the Committee recognises, as discussed in the assumptions above, that not all payments using the system will be the same: different contexts and different customers need different payment products and services. Variations might relate to types of customer interfaces and access arrangements, timing needs, data richness, complexity, conditionality and integration with underlying transactions, fraud risk, operational risk, marketing and pricing.

Given this diversity of needs, ADIs and payments schemes (both current and future) must be given maximum scope to develop a wide range of new payment products and services to offer their differing customer groups using the same basic infrastructure. The Committee's approach is to encourage both scheme and ADI competition, which in turn is the best means of delivering ongoing innovation.

To achieve this, systemic infrastructure will need to be kept separate from customer-oriented products and services. The basic infrastructure will need to be developed and operated collaboratively and will connect (and bind) all ADIs. However, it must also be possible for products and services to be developed by ADIs acting unilaterally and by ADIs with support from payment schemes that coordinate ADIs and other organisations to deliver attractive payment products and services to different groups of customers.

The Committee anticipates that any approved entity, payment scheme, service or processor can seek to use the basic infrastructure as an Overlay Service (including the initial convenience service) on standard and equitable terms (including timing and pricing) of access.

### 3.2.2. Key advantages of separating infrastructure and services

The key advantages of layering the business architecture (separating infrastructure and services) are summarised below:

1. **Operational priorities**: The basic infrastructure will be a utility focussed on meeting the common needs of its ADI members, having regard to the public interest *(O3)*. It will offer access to all ADIs and overlay services on standard, equitable terms. The initial convenience service (and other future overlay services) will be focussed on providing particular end users with a service that they find compelling,

to attract activity into the system. It follows that the operator of an overlay service may have different membership and will need to have different strategic orientation and governance and financial structure from the clearing utility.

2. **Encouraging service diversity and competition**: The layered configuration will alter the competitive dynamics of the current payment services market: it will encourage new and improved payment systems and services to develop in the future, while still maximising economies of scale, broad reach and positive network effects. For example, the Core Criteria require the capacity to send more complete remittance information with a payment, but also acknowledge that the data needs of different industry groups will vary *(S4)*. The layered solution provides scope to accommodate this variation in the future. Once the basic infrastructure is in place and linking ADIs together, the marginal cost of providing a new service should be greatly reduced because any new service (appropriately approved) will be able to use the basic infrastructure.
3. **Minimising project risk**: Excluding customer service elements from the basic infrastructure reduces cost, risk and complexity in the core collaborative build.
4. **Open access**: Separating infrastructure and services maximises prospects of universal participation and reduces coordination risks by allowing ADIs maximum flexibility to choose the supporting services and connectivity they need to offer services to their customers. As a practical matter, all ADIs will have to join the basic infrastructure in order to ensure that the capability for real-time payments is delivered; but not all ADIs (from small country mutual ADIs to business-oriented foreign banks) will be able or need to offer the same services to their customers, particularly considering the cost and benefit of doing so. This should be a matter for individual ADIs, having regard to their customers' needs.

## 3.3. The basic infrastructure

The basic infrastructure will provide open access hub architecture *(S8*), to which all ADIs can connect *(S9)* with the flexibility to support a very wide spectrum of needs. This will maximise economies of scale and network effects. It will also provide an addressing service to support simpler addressing requirements in the Core Criteria *(S5).*

The basic infrastructure will be developed as a new system. This will minimise the risk and impact to the efficient operation of existing payment systems *(S14).* It will also allow the new system to be built for the long term. It should offer the medium-term opportunity, if ADIs so choose, to transition away from existing basic low-value payments infrastructure of cheques and direct entry. This could only occur after the new infrastructure has reached a critical mass of transactions.

### 3.3.1. Guiding principles for the basic infrastructure

The Committee proposes developing infrastructure that will:

- **Enable innovation at the edge**: ADIs and others will have maximum opportunity and flexibility to competitively innovate and develop new services. The infrastructure will enable but not drive innovation over time *(S15).*
- **Be accessible to all ADIs and other approved entities**: Access arrangements to the basic infrastructure will be provided on a fair and transparent basis.

- **Serve all ADIs, with flexibility and scalability**: The basic infrastructure will need to be available to all ADIs and through them to their customers *(S7)*. All ADIs will be able to connect directly to the basic infrastructure and use it to provide payment services to their customers without having to use any other service that is connected to the basic infrastructure (including the initial convenience service). It must also be built with the objective of supporting as wide a variety of different payment uses as practicable, including some not yet conceived of.
- **Focus on efficiency, not growth**: The mission of the infrastructure is efficient processing *(S8)*, not system growth.
- **Focus on resilience**: The basic infrastructure must meet high levels of reliability and security with comprehensive disaster recovery and business continuity *(S11).*
- **Collaborative functionality**: The basic infrastructure will contain the required collaborative functionality to enable ADIs and other approved entities to offer services to their customers that meet the PSB objectives. Decisions regarding development of functionality within the basic infrastructure will be made on a collaborative basis by the governance structure of the clearing utility *(S15 and O4)*.
- **Focus on platform delivery, not commercial services**: The basic infrastructure's primary focus should be on providing a platform that supports fair and open access, on which other payment services can compete with each other, rather than on competing directly with other payment services *(S8 and S9)*.
- **Service provision**: The capabilities developed within the basic infrastructure to support overlay services (such as the initial convenience service) will be generally available to all overlay services on an equitable basis.

### 3.3.2. Guiding principle for use of the basic infrastructure

Organisations represented on the Committee intend to work constructively with any institutions who choose to join the basic infrastructure consistent with the initial strategic objectives listed in section 1.1 above, whether or not those institutions also choose to join the initial convenience service.

The Committee also proposes to invite other organisations who become involved in developing the real-time payments infrastructure to adopt these principles.

### 3.3.3. Core functionality for the basic infrastructure

The Committee proposes the following three core functions of the basic infrastructure:

**Core Function 1**: By the end of 2016 *(S13)*, the basic infrastructure will offer a capability for ADIs, on a close to 24 by 7 basis *(S6),* to initiate and receive a fast credit transfer using an ISO 20022 message format *(S10)* between customer accounts *(S1)*. ADIs who join will be required to receive credit transfer messages sent to them, but will not be required to initiate credit messages. The rules associated with processing credit messages will have the following characteristics:

- a specified maximum short time for confirmation of a valid payment message or rejection of a payment message by the receiving ADI back to the initiating ADI, so that the initiating ADI can advise its customer *(S1, S2 and S12)*; and

- capacity to include a specified maximum amount of additional unstructured data with the payment in line with APCA's current ISO 20022 Interbank Credit Transfer message *(S4 and S10)*[5].

**Core Function 2**: By the end of 2016, a separate payment scheme or service (including an initial convenience service) must be able to connect to the clearing utility to coordinate transaction activity amongst ADIs supporting the service (*S9)*.

**Core Function 3**: By the end of 2017 *(S13)*, an ADI must have the ability to identify an account at another ADI as the destination for a credit transfer using addressing information about the payee other than the account number (such as a mobile phone number). This will allow the payer to be able to confirm the account destination before execution *(S5).*

The Core Functions will be refined during the requirements development phase of the RTP Programme in the first part of 2013. The basic infrastructure will be functionally scalable with the ability to add new capabilities in the future, in accordance with the principles stated in 3.3.1 above *(S15).*

### 3.3.4. Access and participation

The basic infrastructure is designed to support real-time account to account payment services. Consistent with this, the primary participants are likely to be ADIs and service providers for ADIs and will require both access to an exchange settlement account at the Reserve Bank, and maintenance of transaction accounts on behalf of payers and payees. In addition, commercial hubs, services and schemes will be able to obtain access as overlay services.

Beyond these groups, it is possible that the basic infrastructure could provide access to other approved entities (for example, a large user of payment services). This can be considered as the detailed design of the basic infrastructure develops.

### 3.3.5. Meeting the Core Criteria in the basic infrastructure

The Committee believes that together Core Function 1, 2 and 3 provide for the RBA's Core Criteria. These core functions will be delivered in full by the basic infrastructure, without recourse to any other service (including the initial convenience service). However, Core Criteria S1, S2 and S12 may be interpreted as requiring the "Fast Payments Solution" to provide specific retail services to end customers, including "…cooperatively honoured prescribed maximum customer response times…"[6]. In the Committee's view this should not be interpreted so as to require the regulatory imposition of specific service requirements for end users.

The basic infrastructure will specify very fast turnaround times for all messaging, so that both Payer's ADI and Payee's ADI can be assured of near real-time processing through the system. All ADIs and overlay services will be obliged by the rules of the clearing utility to deal with each other in near real-time.

However, the Committee believes that the timing of each ADI accounting to its customer (including the payee ADI making funds available to the payee) should not be specified by the basic infrastructure. This should be left to service performance by the ADI having regard to its general law obligations, customer needs and market competitive pressures.

[5] The Core Criteria require more complete remittance information using the ISO20022 data standard (*S4, S10*). They do not require the initial implementation to meet specialised automation needs of industry groups, but there will need to be capacity to meet these needs in the future.
[6] RBA's Core Criteria S12.

In the Committee's view, this is the best means of promoting flexibility, diversity and innovation in real-time payment services in the long term. For example, a small country credit union may not want to spend scarce member funds to implement real-time funds availability for its customers if they do not demand such a service. Similarly, a foreign bank operating in Australia, serving only international business customers should not be required to deliver real-time funds availability if its customers do not demand it.

With this policy logic in mind, the Committee argues that the intent of criterion S12 (collaborative honouring of prescribed maximum customer response times) is met by the basic infrastructure in that it will allow ADIs to provide this service, but not compel them to do so.

## 3.4. Initial convenience service

The Committee proposes that the initial convenience service will be developed by end 2016 as one of the first overlay services. The intent is to ensure that a compelling proposition for use of the basic infrastructure is available as soon as possible. The design of this service will depend on its commercial evolution, whether it is provided by an existing payment service or scheme, or developed from scratch. However, the Committee's intention is that it will focus on personal convenience payments, particularly those using mobile channels.

This service will need to offer enough business and operational support for ADIs to deliver an attractive value proposition to their customers. It will need to consider the merits of:

- specific rules relating to end customer service expectations, such as the obligation to post to an account and inform the payee in a very short timeframe;
- inter-ADI commercial arrangements such as incentive or interchange payments;
- technology to support payment products and channels attractive to particular user groups;
- branding, business development and marketing programmes; and
- inter-ADI risk management, fraud prevention and dispute resolution as appropriate for the particular services provided.

The initial convenience service will be open to all ADIs to join as they see fit. However, ADIs will always have the option to initiate and receive real-time payments directly through the basic infrastructure. ADIs will need to establish their own priorities for serving customers. In this way, the initial convenience service can maximise the prospects of early volume flowing through the basic infrastructure without requiring the immediate commercial commitment of all ADIs.

The initial convenience service will have to encourage participation through tailoring its offering to the needs of particular users. In this way, market forces will drive its pricing and service characteristics, and its prospects of success will be assisted by being able to rely on the future availability of the basic infrastructure.

### 3.4.1. Functions of the initial convenience service

The Committee does not intend for the initial convenience service to provide for any of the Core Criteria. The relationship between the initial convenience service and the basic infrastructure will be one of service provider (the basic infrastructure) and customer (the initial convenience service). In this way, the initial convenience service will rely on the basic infrastructure for:

- connectivity with ADIs,
- clearing message flows; and
- settlement processing (via the RBA settlement hub).

It will not be possible to use the initial convenience service without the basic infrastructure, whereas the basic infrastructure will not rely on the initial convenience service in any way.

The ADIs represented on the Committee intend to work with the selected provider of the new service to ensure they are able to join it as founding participants in a timely manner.

## 3.5. Description of the preferred business architecture

The proposals above lead to the preferred business architecture illustrated in Figure 1, with the initial convenience service as the first overlay service:

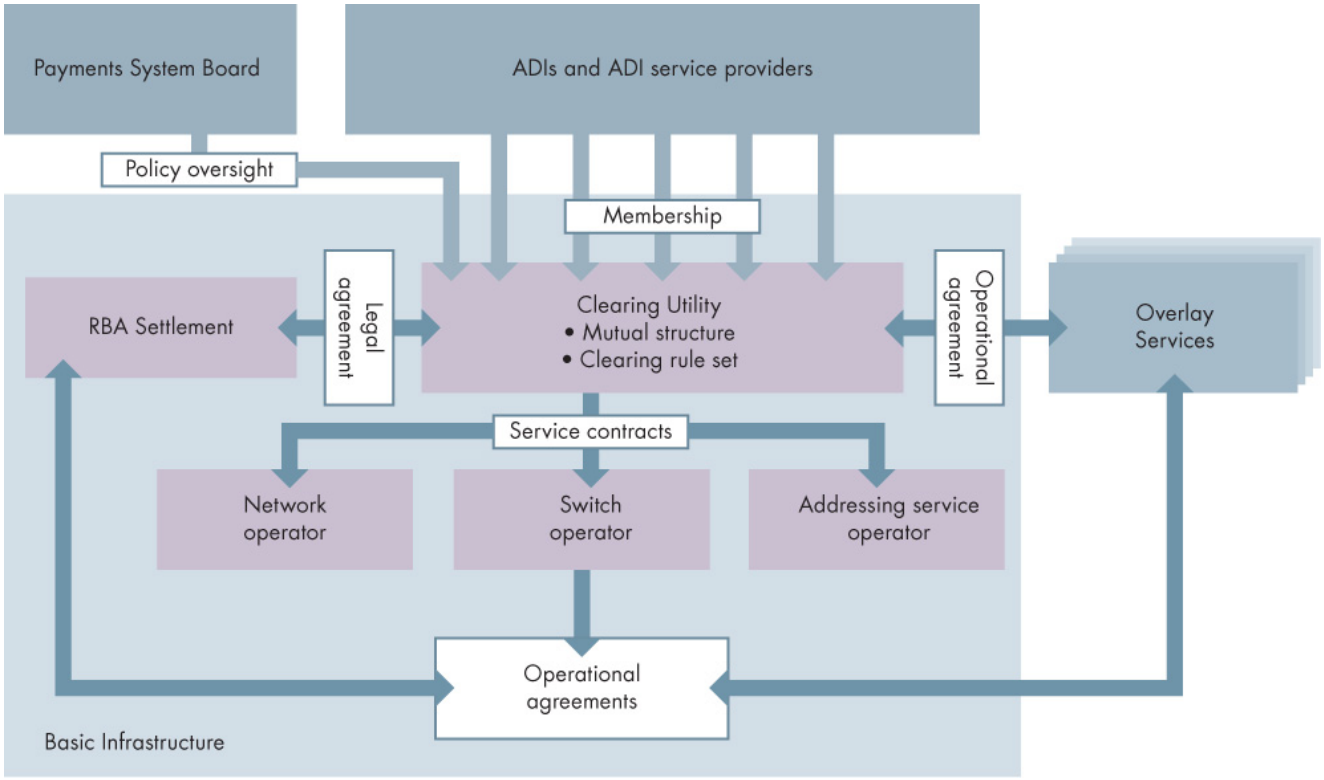


**Figure 1. Business Architecture**

The basic infrastructure will support all required message flows and associated rules:

- between ADIs and/or ADI service providers;
- between ADIs and the initial convenience service; and
- between ADIs and overlay services.

The detailed business architecture will be reviewed during the initial requirements development and design phase of the RTP Programme. The parties and relationships that make up the preferred business architecture are described below.

### 3.5.1. Clearing utility

The core of the business architecture is a central clearing utility. This will be owned and governed by a newly-created mutual organisation, referred to in this proposal as Utility Co[7], whose membership consists of ADIs, wholesale payment service providers for smaller ADIs, and any other approved entities in line with section 3.3.4 above. Membership includes:

- **rights** to use clearing and other services provided through the clearing utility *(S9)*; and
- **obligations** to pay fees and comply with the constitution and rules of the clearing utility.

The rules of the clearing utility will constitute a multilateral contract amongst all ADIs as members to support basic and flexible clearing services. The rules would set the obligations between members necessary to provide the Core Functions of the basic infrastructure. This will include all required rules to support the exchange of payment messages (e.g. dispute resolution and mistaken payments), commensurate with existing clearing streams, for example, BECS.

The utility will rely on external service providers for operational services. This will require it to maintain:

- legal arrangements with the RBA to detail settlement of clearing obligations through the RBA's proposed new settlements hub;
- an outsource service contract with a switch operator to deliver clearing services to members;
- an outsource service contract with a network operator to deliver communications network services to members;
- an outsource service contract with an addressing service operator to deliver addressing services to members (see below); and
- an operational agreement with the initial convenience service, subsequent overlay services, and approved entities connecting directly to support their activities. This aims to meet the Core Criteria requirement to provide support for "future approved entities, commercial hubs and schemes" *(S9).*

The clearing utility would provide centralised functionality such as:

- validation, including timing integrity (and appropriate responses) of all message exchanges;
- billing, system administration (e.g. participation management, overlay management), monitoring/alerts, logging and audit trails; and
- enquiry and reporting facilities for all transactions.

Depending on the outcomes of competitive selection processes, a single entity could provide more than one of these services, with corresponding modifications to contractual relationships. Similarly, the final content of the clearing utility rules will depend upon the capabilities and configuration of the selected operator systems.

[7] Utility Co refers to the legal entity, which, once established, will be the owner of the clearing utility.

### 3.5.2. Switch operator

The clearing switch operator is a service provider of clearing switch services, initially to deliver Core Functions 1 and 2 to ADIs. The switch operator would be selected through a competitive process (see Section 6.11). It would:

- set up and maintain operational interfaces to ADIs and the RBA using the network operator's communications network;
- operate a central clearing switch and all associated technology subject to service level requirements negotiated with the clearing utility and with appropriate performance incentives;
- provide defined operational support for overlay service interfaces (see below);
- maintain operational links to an addressing service as necessary (see below); and
- be subject to periodic service contract review and potential retendering by the clearing utility.

### 3.5.3. Addressing service

The addressing service delivers Core Function 3 and will include:

- rules and procedures for ADIs to associate customer attributes (possible attributes include mobile phone number, email address, Facebook account etc) with underlying account details;
- mutual obligations on ADIs to maintain customer attributes in the service; and
- rules to allocate risks and responsibilities for addressing privacy, error and fraud, possibly with dispute resolution procedures.

It is intended that the addressing service will be administered by the clearing utility and governed by the clearing utility rules. The clearing utility (or some other party depending on the final architecture) will need to maintain a contractual service relationship with an addressing service operator who will:

- set up and maintain operational interfaces to members possibly using the network operator's communications network or separately;
- operate an addressing service database and all associated technology subject to service level requirements negotiated with the clearing utility and with appropriate performance incentives;
- maintain operational links to the switch service, if necessary (see above); and
- be subject to periodic service contract review and potential retendering by the clearing utility.

### 3.5.4. Communications network

The communications network provides secure, resilient and scalable communications network linkages to support the connections to the switch services and, if required, the addressing service. This would need to include appropriate connectivity arrangements to suit the common needs of its ADI members, service providers and overlay services *(S9)*. If provided separately from the other services, the clearing utility would need to maintain a contractual service relationship with a network operator.

### 3.5.5. Overlay services

As part of the basic infrastructure, the clearing utility will provide limited defined services to ADIs. These will be sufficient to allow an ADI to develop its own payment products to offer to its customers, but the utility will not provide the kind of enhanced business and operational support provided by payment schemes such as BPAY and card schemes. Payment services and schemes can provide:

- specific workflow, service agreements, data requirements and technology to support payment products and channels attractive to particular user groups;
- branding, business development, marketing programmes, recommended pricing and commercial incentives; and
- inter-ADI risk management, fraud prevention and dispute resolution tailored to particular payment and transaction types.

The Committee anticipates that ADIs will see value in scheme services such as these for products that use the clearing utility. They may want to use an existing payment scheme to do this, or develop new collaborative or commercial arrangements.

It is proposed that the clearing utility will enable this by recognising and supporting overlay services. An overlay service can be any set of extra obligations and rights in relation to transfers in the clearing utility affecting two or more members. Messages in the clearing utility that are subject to the overlay service would be flagged accordingly, and could only flow between members who have agreed to participate in the overlay service. Participation in any overlay service would be optional for clearing utility members.

An overlay service could be housed within an existing payment scheme or service, or developed collaboratively from scratch by two or more members once the clearing utility commences operation. The clearing utility would recognise any overlay service which was not inconsistent with its own rules and operational processes, and provide operational and technical interfaces to support the overlay service.

### 3.5.6. RBA settlement

The Committee supports the RBA's ongoing role as settlement service provider. The RTP Programme will include a Settlement Hub Project to enable settlement of each payment from the new infrastructure in central bank funds through the enhanced RITS settlement service *(S3)*.

The business architecture assumption is that the RBA's settlement service will ensure that there is no settlement risk for ADIs, thus providing the ability to make funds available to the recipient in a timely manner without any credit risk exposure.

### 3.5.7. Standards maintenance

APCA has already established an Australian ISO 20022 standards maintenance framework to support ongoing evolution of the ISO 20022 standard in Australia and ensure alignment with global standards. The first product of the framework was the Australian schema, which is referred to in the Core Criteria. The Committee sees value in continuing with a collaborative standards framework to help align uses of ISO 20022 in Australian payments.

# 4. Ongoing Ownership, Governance and Funding

This section refers to the business architecture described above, particularly Figure 1. RBA "Ongoing Operation" Core Criteria are relevant *(O1 –O7).*

## 4.1. Governance and funding of the clearing utility

The Core Criteria require an operational governance body to ensure the secure, efficient and reliable operation of the system *(O2).* The body must have in place effective decision-making processes, independent representation and must take into account the interests of large, medium and smaller ADIs *(O3)*.

### 4.1.1. Governance

The proposed clearing utility offers a basic clearing service subject to rules that would bind members as a multilateral contract. It must have the capacity to evolve and develop over time in response to the needs of members, but will not operate in a highly competitive marketplace. It needs to be financially self-sustaining (with funding for ongoing re-investment), but need not be commercially oriented. *(O4)*.

A corollary is that business development risk rests primarily with ADIs, who will need to invest firstly to set up the clearing utility, and then to connect to it and comply with its rules.

All these considerations suggest a mutual governance structure for the clearing utility, where members as a community have the primary influence in decision-making *(O2)*. Broadly, influence and investment should be proportional to use of the system. However, decision making arrangements will be such that they don't unfairly favour any one category of member *(O3)*.

These arrangements will include independent representatives on the governance body. The independent representatives should have some rights in the decision making process *(G4)*. The RBA has expressed an interest in having an ongoing role in the governance of the clearing utility in its capacity as owner/operator of the Settlements Hub. The Committee proposes to work with the RBA to determine appropriate arrangements as the clearing utility governance is set up.

Given that initially there is likely to be an absence of competitive constraints, mutual governance is also desirable to avoid the risk of monopolistic behaviour by the clearing utility.

### 4.1.2. Managing conflicts

It is to be expected that large payments organisations will be involved in governance of the RTP programme and of the clearing utility, and also involved in other industry activities including the initial convenience service and other overlay services. This will require careful management of potential conflicts of interest. Potential inter-organisational conflicts are well understood in the payments industry because of the existing overlap in participation across different payments collaborations. The legal framework for managing conflicts of interest is well developed and includes:

- compliance with company law obligations;
- separation of functions and responsibilities;
- regular and complete disclosures of interest;
- use of independent chairs and other representatives; and
- exclusion from decision-making where a material conflict arises.

### 4.1.3. Funding

The clearing utility should, in a transparent manner, set and charge all members system fees sufficient to meet all operating costs and develop reserves for capital reinvestment over time at a level mutually agreed *(O4)*. The use of outsource arrangements to the clearing switch operator and addressing service operator will reduce initial and ongoing capital investment, to the extent that the operators can be assured of service fees to reflect their own investment.

The clearing utility would need dedicated management from an early stage of development. Founding members would need to fund the establishment of the clearing utility structure, develop its rules, develop its outsource service level requirements and conduct a fair and rigorous operator selection process.

It is proposed that APCA provide sufficient seed funding through its own membership structure to enable the establishment of the clearing utility governance structure, or Utility Co (anticipated by the end of 2013). The intention is that these funds would be contributed on a mutual, non-profit basis by APCA members. This would be the most efficient way of launching this major industry collaborative project. Once established, members of the clearing utility could take up the burden of funding initial development (with the associated rights and responsibilities).

The initial funding principles should consider how best to encourage early and widespread participation from ADIs, while ensuring that participation is available on standard and equitable terms to all potential participants.

Returns on investment by mutual members will primarily be realised by use of the clearing utility to offer profitable services to customers. Once the clearing utility takes on the project funding burden, it could choose to prescribe a rate of return on direct investment by mutual members, consistent with the operating principle of being financially self-sustaining. This will be a matter for the clearing utility governance to decide.

The initial convenience service is intended to be commercial, competitive, and separate from the clearing utility. It may not be a mutual structure. Principles of capital investment return will be a matter for the operator of the service.

## 4.2. Pricing principles

The board of the clearing utility will be responsible for setting utility fees. In the Committee's view, operating fees should:

- be mutually set;
- be transparent and fair, and promote access and prevent misuse of market power *(O5)*;
- cover costs associated with service provision, support, maintenance, infrastructure upgrade and future enhancements as mutually agreed (*O4)*; and
- facilitate accurate price signals to those choosing to use the service of the real costs of the service.

The clearing utility would also need to ensure that adequate protections against breaches of relevant competition law are in place for ADI members.

## 4.3. Operators and operating agreements

The operators — switch, network and addressing service — would need to be selected using an open competitive process based on preset criteria *(G8).* As the selection processes will ensure the best operator(s) are chosen, and the outsource contracts will ensure appropriate service levels, these entities can take any governance form. In the selection process, preference could be given to operations based in Australia *(O7)*. Outsource agreements will be on arms-length, commercial terms for reasonably long periods (say 7-10 years) subject to performance. They should however be subject to review at the end of the term to retain some level of contestability.

Ideally the operators will invest the capital to develop the services and recover investment through activity based service fees. However, it will be important to ensure the operators are properly funded notwithstanding uncertainty as to likely activity levels. It is not clear how the utility will be able to forecast activity levels through the system; it may be necessary for ADIs to commit to minimum activity levels, with fee incentives for reaching or exceeding those levels.

## 4.4. Policy oversight

As contemplated in the Core Criteria, the clearing utility's governance will expressly allow for ongoing public policy input, both in relation to the public interest and the RBA's role as settlement hub *(O1, O3 and O6)*. There would also need to be a framework for broader stakeholder consultation. This could be managed directly by the clearing utility, for example through white papers or advisory councils, or could be "outsourced" to a future Payments Council to minimise costs.

## 4.5. Initial convenience service

The initial convenience service is intended to be commercially offered and to compete directly with other payment services. As such, its ownership, governance, funding and pricing should be separate from the clearing utility and dictated by commercial and competitive factors. The Committee intends to conduct market soundings for entities interested in offering an initial convenience service. See Section 6.16.

All overlay services, including the initial convenience service, will rely on the basic infrastructure as described above. The clearing utility would have the power to charge fees to overlay services in a fair, equitable and transparent manner that promotes innovation and competition. Another approach might be to charge payer and/or payee institutions for all payments, including those initiated under any overlay service.

In determining its pricing policy to participants and overlay services, the clearing utility will need to act in a competitively neutral and transparent way, given that participants will compete with each other, and overlay services may compete with each other. Pricing principles will need to be developed as part of the project to set up the clearing utility.

# 5. Project Outline and Staging

The business architecture is intended to be delivered by the Real-Time Payments Programme (RTP Programme) according to the high-level timetable set out below in Figure 2:

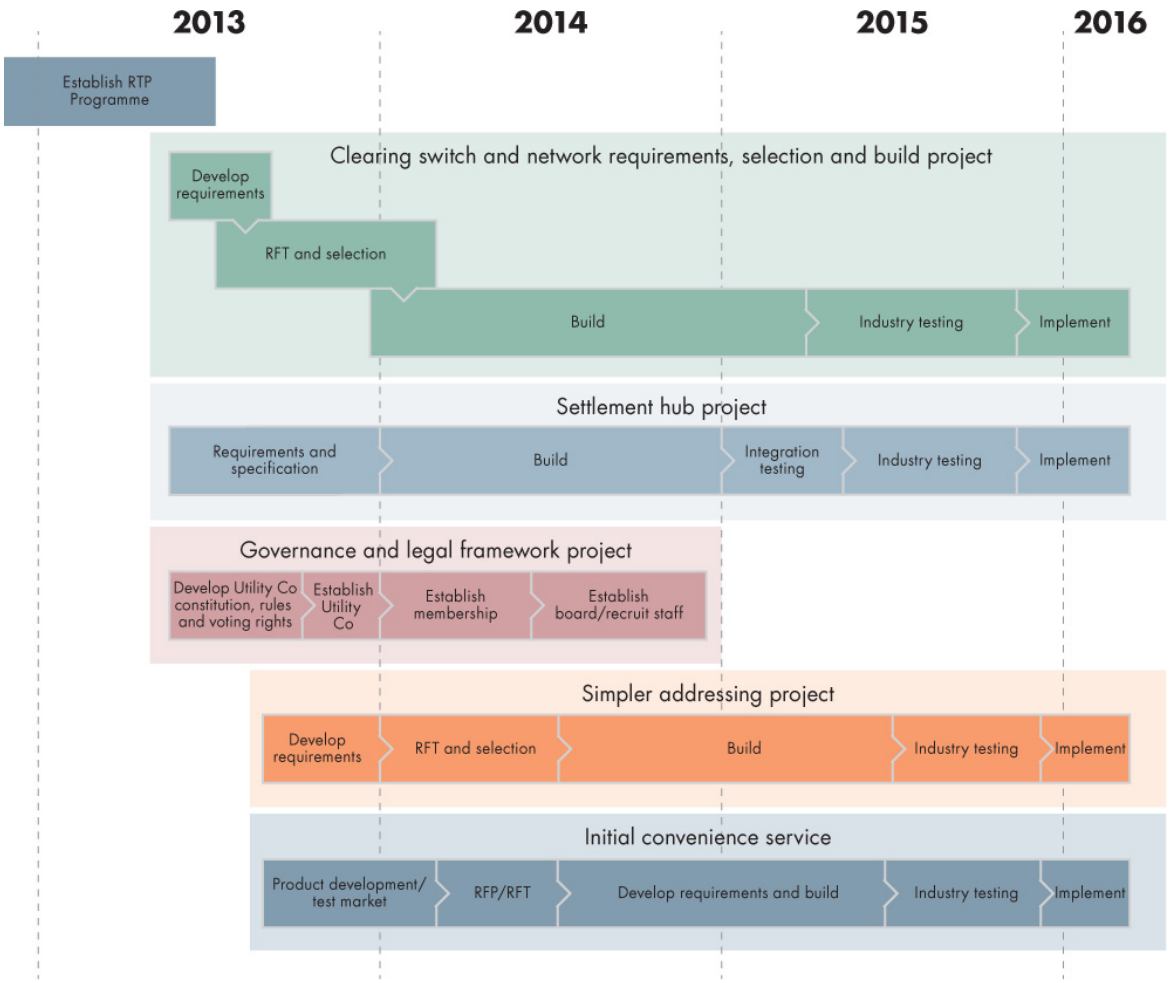


**Figure 2. High-level timetable**

## 5.1. Delivery targets

The RTP Programme Steering Committee should be established as soon as possible after acceptance of this proposal by the PSB. The Steering Committee should aim to establish Utility Co, as the operator of the clearing utility, by the end of 2013.

The Core Functions of the basic infrastructure and the initial convenience service are targeted to be available early 2016. The delivery of the basic infrastructure will not be dependent on the delivery of the initial convenience service or any other overlay service.

The basic infrastructure will support a migration period where not all ADIs are connected and can commence live operations following the readiness of connected ADIs.

Detailed plans for these projects will be developed as part of initiation programme phase, and will require sign-off by the RTP Programme Steering Committee.

# 6. Project Governance

The RTP Programme organisation chart is set out below in Figure 3.

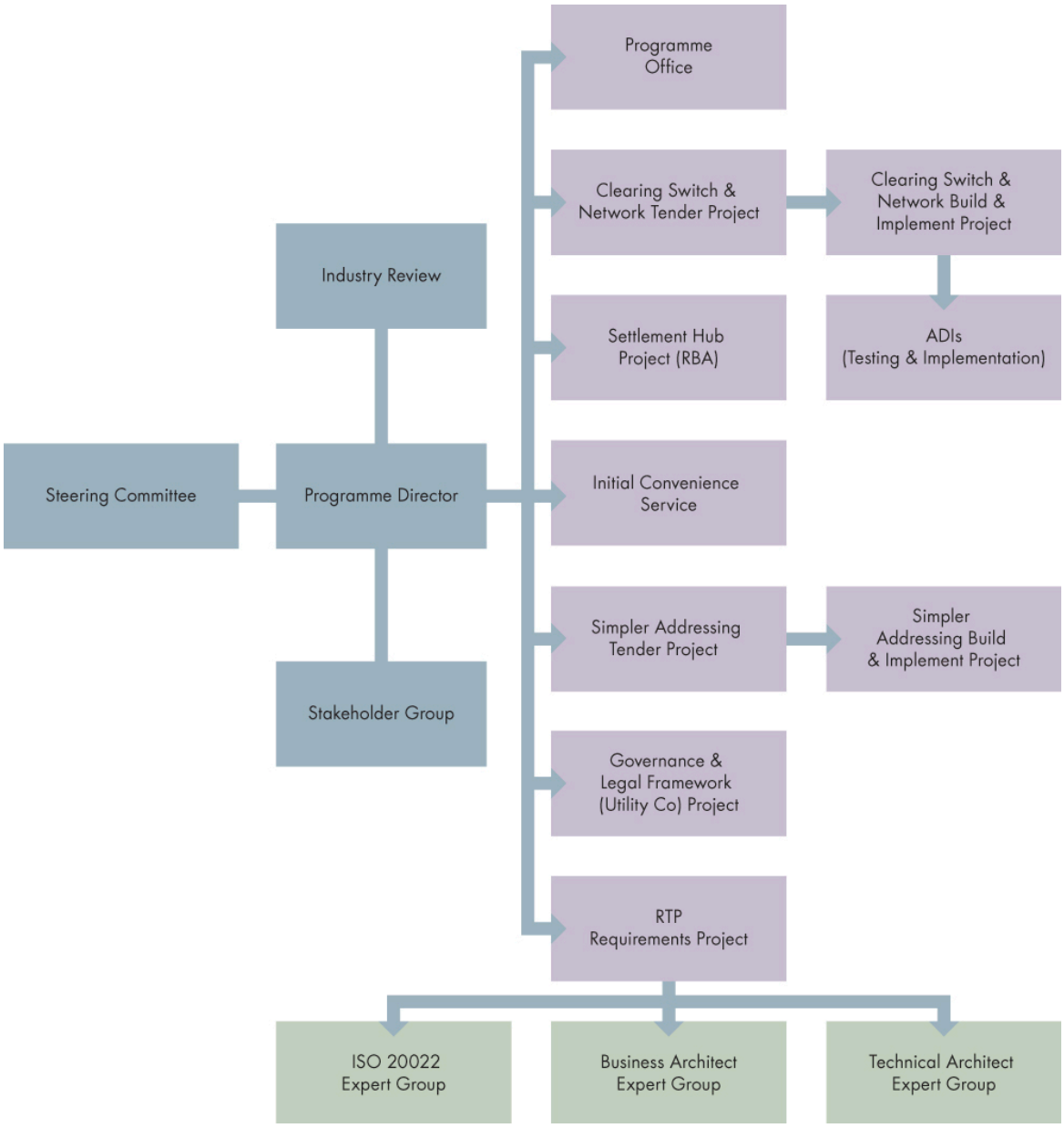


**Figure 3. RTP programme organisation chart**

## 6.1. Steering Committee

The RTP Programme will be overseen by a Steering Committee with full decision-making responsibility for the Programme *(G1)*.

The Steering Committee will manage the budget for the RTP Programme, other than the Settlement Project, which is RBA's responsibility.

The Steering Committee will include senior representatives of a cross-section of anticipated users of the basic infrastructure (small, medium, larger ADIs), and have an independent Chair *(G4)*. On this basis it is proposed that the organisation members of the existing RTP Committee, as well as an independent Chair, form the core of the Steering Committee. The Steering Committee should also include two senior executives of the RBA, representing policy and operational (settlements hub) perspectives *(G2 & G5)*, ensuring that the RTP Programme takes into account public interest considerations and representation from other industry stakeholders. The existing terms of reference of the Real-Time Payments Committee, which already refer to public interest considerations, would need to be amended to reflect changed composition and decision-making rights, and to meet the Core Criteria.

Decision making arrangements will be such that they do not unfairly favour any one category of member.

Project success rests on the ongoing commitment of key ADIs and the RBA. Accordingly, the Committee proposes the following staged approach to stakeholder commitment:

**Stage 1**: Publish the industry proposal once endorsed by the PSB.

**Stage 2**: Develop a memorandum of understanding (MOU) between ADIs to formalise engagement in the RTP Programme and intent to connect to the clearing utility. Signing the MOU will also provide membership to the Stakeholder Group. Organisations represented on the Steering Committee intend to be the initial signatories.

**Stage 3**: Once detailed plans are developed and costed, the Steering Committee will seek commitment of funds by ADI members to participate in the clearing utility and fund the RTP Programme, as per an agreed schedule.

## 6.2. Programme Director and Program Office

### 6.2.1. Programme Director

The Programme Director will manage the overall RTP Programme reporting to, and being accountable to, the Steering Committee directly.

The Director will, supported directly by the Programme Office, develop a comprehensive programme plan (for the approval of the Steering Committee) that will enunciate the RTP Programme objectives and describe how the Programme will be conducted to meet those objectives. The Programme Director will also be supported and overseen as appropriate by the Industry Review function.

Importantly, the Programme Director will establish and promote relationships with key interested parties such as the RBA Policy area and the proposed Payments Council.

### 6.2.2. Programme Office

The Programme Office will provide support to the Steering Committee and the Programme Director in execution of the overall RTP Programme. It will be managed by project managers, reporting to the Programme Director, and staffed by programme office resources.

Key functions to be undertaken will include:

1. Overall RTP Programme planning, tracking and status reporting *(G7)*;
2. Clearly identifying roles and responsibilities in relation to the Programme plan;
3. Overall RTP Programme budget and expenditure control;
4. RTP Programme Risk Management;
5. Identifying and addressing conflicts of interest *(G3)*;
6. Support, including secretarial, for the Steering Committee and the Stakeholder Group;
7. Developing and implementing criteria and processes for solution providers *(G8)*.
8. Overall RTP Programme communications both internal and external *(G7)*;
9. RTP Programme architecture and design review; and
10. Execution of RTP Programme quality plan, including both internal and external audit (*G10*).

The Committee has determined that the Programme Director and Programme Office should be provided independently from ADIs on an outsourced basis. The intention is to hire a highly professional and skilled organisation to supply the Programme Director and Programme Office and to take responsibility for the delivery of the Programme reporting directly to the Steering Committee. The Steering Committee will set clear objectives and timeframes for delivery and receive regular status reports of progress made. The outsource contract will include key performance criteria to ensure the selected organisation has clear responsibilities in relation to programme progress and success. In the Committee's view this approach reduces delivery risk as the organisation engaged will have both strong reputational and commercial interest in seeing a successful project through to its conclusion.

### 6.2.3. External audit

An expert external audit capability, independent from the providers of the Programme Director and Programme Office, will be available to the Steering Committee and there will also be an "Industry Review" function to work closely with the Programme Manager to both assist in delivery and to review progress *(G10)*.

The Committee will undertake a selection process to choose a provider in early 2013 by inviting suitably qualified organisations to tender to APCA for supply of the Programme Director and Programme Office.

## 6.3. Stakeholder Group

A Stakeholder Group will be established with a representative of each ADI to be connected either directly or indirectly to the basic infrastructure and relevant service providers. The representative will be a senior officer of the ADI with relevant responsibility for their organisation's ability to connect to and to process payments received.

The representative will be the escalation point for the RTP Programme should an ADI provide an adverse status report on its organisation's progress against plan. The representative may be required to provide a report to and/or attend the Steering Committee to provide a full explanation and a rectification report.

A Stakeholder Group forum will be held early in the project to apprise all participants of the Programme objectives and plan, and subsequently at critical Programme milestones (*G7*). Any concerns raised by a Stakeholder will be referred to the Steering Committee by the Programme Director where it cannot be resolved to the satisfaction of the Stakeholder (*G6*).

## 6.4. Community Liaison

The views of the broader community have been addressed through extensive consultation over the last two years. Further broad community consultation at this stage would delay the project significantly. RBA's close involvement will ensure broader interests are taken into account.

For the future, the Programme should consider appropriate publication and consultation as work proceeds. It is also expected that individual ADIs will work closely with their customers (e.g. end users, merchants, etc.) and their service providers. The Steering Committee will establish a point of contact for interested parties outside the Stakeholder Group at the commencement of the Programme *(G7)*.

## 6.5. Industry Review

The Industry Review function will provide guidance and support to the Programme Director and will be staffed by industry representatives. The function will have the requisite payment industry skills, experience and knowledge to support the Programme Director in delivery of the RTP Programme's outcomes and to provide guidance in relation to urgent matters. This will include expertise in Stakeholder engagement.

## 6.6. Real-Time Payments Requirements Project

The Real-Time Payments Requirements project will develop the functional, technical and network requirements for building the infrastructure. It will be headed by a project manager, reporting to the Programme Director, and staffed by business/technical analysts. This group will need to liaise with experts from the relevant ADIs and the RBA in the development of the requirements.

*Note. This project could be outsourced.*

## 6.7. Business Architecture Expert Group

The Business Architecture Expert Group will assist the Real-Time Payments Requirements Project in the development of functional requirements for the basic infrastructure build. This group will comprise representatives from ADIs with the necessary expertise.

## 6.8. Technical Architecture Expert Group

The Technical Architecture Expert Group will assist the Real-Time Payments Requirements Project in the development of technical and network requirements for the basic infrastructure build. This group will comprise representatives from ADIs with the necessary expertise.

## 6.9. ISO 20022 Standards Expert Group

The ISO 20022 Standards Expert Group will assist the Real-Time Payments Requirements Project in the development of the appropriate ISO 20022 messages to support the basic infrastructure build. This group will comprise representatives from ADI's with the necessary expertise.

## 6.10. Governance and Legal Framework Project

The Governance and Legal Framework project will develop the MOU, then establish the Utility Co and its governance and operating arrangements, including membership, representation and decision-making rights and funding burden of its membership. It will develop the rule framework for the basic infrastructure — the rights and obligations assumed by participants and the compliance framework applicable to these.

## 6.11. Clearing Switch & Network Tender Project

The Clearing Switch and Network Tender Project will run a tender process through to selection and contractual sign-up with the clearing switch and network vendor selected. It will be headed by a project manager, reporting to the Programme Director, and staffed by business analysts and legal officers. ADI member resources will be used during the evaluation process.

The selection process will be subject to a fair, transparent and objective process, with appropriate management of conflicts of interest *(G8)*.

The final selection of the clearing switch and network provider will be made by the Steering Committee. The owning or contractual body will be Utility Co, or APCA on a transitional basis depending on the timing of the formation of Utility Co.

*Note. This project could be outsourced.*

## 6.12. Clearing Switch & Network Build & Implement Project

The successful vendor for the clearing switch and network build will be required to provide a single contact point (Project Director) to oversee this work and report on progress to the Programme Director *(G9)*.

## 6.13. Settlement Hub Project (RBA)

The RBA will be required to provide a single contact point (Project Director) to oversee this work and report on progress to the Programme Director.

## 6.14. Simpler Addressing Tender Project

The Simpler Addressing Tender Project will run a tender process through to selection and contractual sign-up with the simpler addressing vendor selected. It will be headed by a project manager, reporting to the Programme Director, and staffed by business analysts and legal officers. ADI member resources will be used during the evaluation process. The Committee notes that privacy issues related to offering the service will need to be carefully addressed and evaluated by ADIs.

It may be determined that this tender process be merged with the tender process for the clearing switch.

The selection process will be subject to a fair, transparent and objective process, with appropriate management of conflicts of interest *(G8)*.

The final selection of the addressing solution will be made by the Steering Committee. The owning or contractual body will be Utility Co, or APCA on a transitional basis depending on the timing of the formation of Utility Co.

*Note. This project could be outsourced.*

## 6.15. Simpler Addressing Build & Implement Project

The successful vendor for the simpler addressing build will be required to provide a single contact point (Project Director) to oversee this work and report on progress to the Programme Director (*G9*).

## 6.16. Initial Convenience Service Project

The programme governance will not have responsibility for implementing the initial convenience service. Instead, the intention is to invite expressions of interest from service providers and schemes to independently offer an initial convenience service timed to commence at the same time as the basic infrastructure. The role of the RTP Programme will be to coordinate the timing of delivery of the initial convenience service, to be developed separately by the successful tenderer.

It is possible that the Steering Committee may need to consider multiple proposals from different bodies. The provision (build and implement) of this service could be achieved either by ADIs that have opted to be part of the development or by an existing service provider.

Once a plan is agreed with a proposer, the coordination aspects of implementing the selected service will fold in to the overall RTP Programme to ensure a coordinated effort and an efficient use of resources.

While the primary goal of the RTP programme will be delivery of the basic infrastructure, the expectation is to deliver the initial convenience service at the same time in order to maximise early take-up. However, the basic infrastructure is not functionally dependent on the initial convenience service or any other overlay service.
*Note. This project could be outsourced.*

# 7. Next Steps

Following the approval of this proposal by the PSB at their February 2013 meeting, the RTP Programme will be launched as quickly as possible. The Committee is already undertaking preparatory work in anticipation of this. Immediate next steps on approval would be:

1. This Proposal to be published on the APCA website;
2. APCA to confirm initial seed funding;
3. The Committee to be reconstituted into the RTP Steering Committee, and a schedule of meetings established (section 6.1);
4. The Steering Committee, supported by APCA management would begin selection of an independent outsource organisation for Programme Director and the Programme Office; and
5. APCA management would develop a Memorandum of Understanding and Terms of Reference for a Stakeholder Group (section 6.1).