

31 August 2011

Mr Christopher Kent  
Head of Payments Policy Department  
Reserve Bank of Australia  
GPO Box 3947  
SYDNEY

Dear Mr Kent

National Australia Bank appreciates the opportunity to provide a submission to the Reserve Bank of Australia in response to the Strategic Review of Innovation in the Payments System: Issues for Consultation paper dated June 2011.

National Australia Bank (NAB) is supportive of the RBA's strategic review of innovation in the Australian payments system.

The Australian payments system has evolved over the previous decades and NAB recognises the importance of continuing innovation in the payment system to ensure a robust and efficient system which keeps pace with global payment systems.

This response has addressed your key themes (rather than each question individually). NAB's critical issues are:

- ensuring the future framework is supportive of both proprietary and industry innovation responses;
- payments systems remain accessible to the full spectrum of individual and non-individual clients on a cost effective basis;
- innovations in settlement timing between payer and payee are introduced on a cost-effective and level-playing field basis.

NAB looks forward to the opportunity to discuss our submission with the Reserve Bank in greater detail, building on our earlier engagement in 2011.

Yours sincerely

David Gall  
Executive General Manager, Working Capital Services

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## **Section 1 – Executive Review**

NAB is strongly committed to its role in developing and promoting a highly efficient, innovative and stable Payments Industry in Australia.

NAB believes one of the fundamental building blocks on which successful innovation, either proprietary or system wide, is based relies on market participants to have system platforms which support innovation and ensure that innovation can be delivered in a timely and cost effective manner. It is by virtue of this basic principle that NAB is currently undertaking an extensive program of replacement of its core systems under the banner of its NextGen and Payments Transformation programs.

To illustrate NAB's commitment to innovation NAB's Payments Transformation Program is a multi year journey planned to progressively replace our core payments processing infrastructure with a modern and flexible architecture, specifically designed to handle future change, coupled with an efficient set of processes and an optimised operating model. While this work is focussed on core payments processing infrastructure, it will provide the foundation to enable more efficient innovation in product and channel.

NAB acknowledges the high efficacy of the Australian payments system and the positive risk environment that has evolved over many years. Continued careful and considered management in regard to innovation in the payments system is required to ensure that operational risk within the system is not increased. NAB is of the view that maintaining the efficacy of the payments system remains of paramount importance.

One of the issues for consultation is the efficiency of current governance arrangements. Whilst NAB has no major issues with the current governance arrangements we are supportive of reviewing the current arrangements, in particular an enhanced and broader representation structure of APCA.

The decline in traditional payments methods such as cheques is another issue discussed in the consultation paper. NAB is of the belief that the current industry engagement process coupled with strong competition is the correct process to ensure the resolution of issues facing the industry concerning the future provision of cheques without the requirement for regulatory intervention.

Another major issue for consultation involves the identification by the RBA of current or emerging gaps in innovation in the payment system. With the increasing migration of customers to electronic payments there is continual refinement required for satisfying end users needs. Issues identified such as timeliness of payments and transmission of data with payments is reflective of changing customer needs and as such a competitive market will innovate in order to address these emerging requirements. This requires a consistent and optimal level of investment by all industry participants. To assist in the progression of innovation there is a potential role for a central body to develop with the industry an "in principle" road map of system innovation to the payment system across the broader short to medium term horizon. This may be increasingly pertinent in light of the recently announced winding down of the MAMBO project.

NAB remains committed to innovation in the payment system and a competitive industry environment will be a major force in driving Australian payments innovation. In the coming years however, this environment will be tempered, in the case of NAB and a number of other Australian financial institutions, with the large investment being made in core system replacements and the additional projects already identified to continue improving the customer experience within the Australian payments landscape.

## Section 2 - Decline in Traditional Payment Methods

### The Decline of Cheques

“Over the last 12 years or so cheques have gone from being the most common form of non-cash payment to the least common form of non-cash payment”

*Chris Hamilton, CEO, APCA 2011-08-10*

“Despite having fallen from 40% of the number of non-cash payments in 1995 to around 5 per cent currently, cheques are still in common use for one-off high-value payments, small and medium-sized enterprise (SME) payments, superannuation payments, one-off government payments, dividends, donations and small personal payments.”

*Strategic Review of Innovation in the Payments System: Issues for Consultation June 2011*

The payments industry through the auspices of APCA has undertaken a comprehensive study and review of the use and acceptance of cheques in Australia. NAB has been a participant and supporter of this study to better understand why cheques are no longer being utilised, with the rate of decline being circa 9% per annum over 4 years.

APCA has developed a Public Consultation Paper to identify where the payments industry can assist the public in replacing cheques in those areas where there is still a dependency on cheques as a method of payment. The aim of the consultation paper is to ensure that as cheques become scarcer and, inevitably, more difficult to use, the industry can work to ensure there are adequate replacements for cheques for the community. APCA will be responsible for leading and working with the industry and the community around the future of cheques.

NAB will proactively manage and formulate a position in response to APCA’s hypothesis that cheques are in a permanent and irreversible decline, whilst collaborating with APCA and its members.

NAB is currently in the process, in collaboration with APCA, of forming a future cheque position. Consideration will be given to the following factors:

- Any change to current cheque offering must complement NAB’s Fair Value Agenda (NAB’s Fair Value Agenda is about providing a fair exchange between NAB, our customers, our people, our shareholders and the broader community).
- Customer demographics pertaining to cheque usage will be a key factor ensuring customer segment needs are recognised and catered for. This includes but is not limited to specific customer segments such as remote and isolated locations where access remains limited, charitable organisations, government payments, and the elderly.
- Investigation of alternative payment instruments as a replacement to cheques.

- Full understanding of associated risks of any proposition regarding decommissioning cheques in the future and review of global experience relating to cheque usage decline.
- Efficient and effective cheque processing to be investigated. NAB is supportive of ensuring improved efficiencies are investigated and undertaken to ensure effective cost management in light of declining cheque volumes.

Whilst NAB is still in the process of formulating a cheque future state position, our preliminary view is that the de-commission of cheques as a Payment Instrument is not the preferred option.

Once we have finalised our position in relation to cheques, in collaboration with APCA, we would be pleased to discuss our position further with the RBA. We do believe however that the current industry engagement process coupled with strong competition is the appropriate path to address the issues concerning the future provision of cheques.

## **Section 3 - The Environment for Innovation in the Australian Payments System**

“RBA Assistant Governor Malcolm Edey said the bank was well aware that it could not regulate innovation into being, but there was a need for system-wide changes that banks might not reach individually”.

*Business Spectator, 29 March 2011*

### **Difficulties in Innovation**

One of NAB’s key commitments is making banking easier for customers, which means focussing on innovation, accessibility and reliability.

NAB is committed to leveraging and delivering new payments capabilities to customers as technology platforms continue to evolve. We have already led the industry in many areas and will continue to strive to provide customers with the best possible solutions.

Examples of such recent innovation include: significant enhancements to mobile banking functionality including the launch of NAB apps for iPhone, iPad and Google Android smartphones, numerous ATM and Internet banking enhancements including “personalisation” of favourite ATM transactions, enhanced SMS security for Internet Banking transactions above \$2500, deployment of Visa payWave technology and the successful launch of UBank including USaver and UHomeLoan.

One of the key inhibitors we have identified regarding innovation is the ability to be able to deliver products in a timely manner to market. It is for this reason combined with the requirement to ensure ongoing stability in our systems that NAB is currently undertaking its core system replacement and payments remediation activity.

It is our strong view that in order to achieve innovation in payments it is firstly important to ensure that we have system platforms which will support innovation. Aging and complex systems translate into complex and costly development in order to bring new products to the market. We therefore believe that replacing our core systems will be an important enabler for the delivery of innovation in a timely, cost effective and stable manner in the future.

This also means that when global standards start to emerge, such as ISO20022 we can move with the market promptly and cost effectively.

It may however be noteworthy to consider that the industry could assist in driving innovation by recognising that whilst core system replacement is key in the short to medium term, there could be a role for a central body to develop with the industry an “in principle” road map of payment system innovation across a broader four to ten year horizon. This would require agreed industry lead times (consistent with the technical nature & complexity of a given initiative e.g. low value same day settlement) and prior formal participant commitment, and would facilitate inclusion in the participant banks strategic planning and longer term capital & change forecasting process.

Whilst all types of innovation are required for an efficient and robust payment system NAB acknowledges that the RBA's major concern revolves around industry or system-wide innovation.

One of the key requirements for successful system-wide payments innovation is the existence of a business case for each industry participant. Competition for investment dollars already exists within financial institutions, with competing priorities including proprietary innovation, industry innovation and compliance requirements. Therefore a business case is a key requirement to allow collaboration between participants. Participation in an industry innovation cannot be solely based on being a responsible industry participant.

NAB is a strong supporter of industry innovation where the industry is addressing end user needs and can deliver results to both the industry and industry participants, backed up by a robust and strong business case, delivered within agreed and realistic timeframes and in a cost effective manner.

NAB's withdrawal from the industry MAMBO project is a clear example of where NAB is fully supportive of industry innovation however such innovation must adhere to the above requirements or the heightened execution risk cannot be justified for continuing participation.

System wide innovation has proven most effective when managed and coordinated via a central body with an established steering group which includes participant representation, as evidenced by APCA's role in the recent Payments Clearing Low Value Migration project (to replace low speed bilateral transmission links). In addition to providing a change governance mechanism, APCA's role on this initiative has been key in ensuring participant collaboration, coordination of change activity and the resolution of participant challenges faced.

NAB acknowledges EFTPOS Payments Australia Limited (EPAL) on their efforts in focusing on innovation in payments in Australia. EPAL's planned developments are significant and incorporated in their development plan includes contactless technology, mobile payments, pre-paid debit, and purse applications, P2P, Government payments, switch infrastructure and interoperability with the international community.

### **Representation in Industry Governance**

NAB is an active member on industry bodies and has representation on each clearing stream within APCA. Whilst NAB is supportive of the initiatives and governance undertaken by APCA changes to the structure of industry representation within Australia could have some benefits.

Our views in relation to this include:

- We refer to the following statement regarding APCA's responsibility – "APCA is the primary vehicle for payments industry collaboration with a mandate to improve the safety, reliability, equity, convenience and efficiency



of the Australian payments system”<sup>1</sup>. In the evolving and maturing Australian payment space we suggest there is a broader role APCA could evolve into from its origins as the industry management body of clearing systems.

- APCA representation could be broadened from the current APCA membership structure. Potential suggestions include inclusion on the Board of independent directors and/or inclusion of nominated key industry representation from industries which are large users in payments e.g. superannuation, insurance and real estate (land transfer settlement) industries. This could result in a diversity of thought and experience.
- NAB is supportive of the practice of some international payment governance bodies, as an example UK Payments Council or PASA of the practice to elect directors or councillors to serve for a set tenure such as three years.

We would be pleased to discuss the potential broadening of representation on industry bodies, particularly in relation to APCA, further with the RBA. Understanding better the requirements of the broader payments environment may allow for a better tailoring of product to suit customers needs. We do not see that such a change would alter the current premise of the RBA remaining the Manager and APCA continuing its role as Administrator for Payments within the Australian industry.

### **Structure of Clearing and Settlement Rules**

There is clearly an evolving environment between low value payments and high value payments clearing schemes (CS2 and CS4). It is becoming more evident that the industry is moving towards increasing intra-day postings for CS2 payments, carrying the daily settlement risk and making funds available to customers’ accounts earlier than next day after settlement. Therefore by default CS2 is moving to a closer to real-time settlement, similar to RTGS and at a generally lower cost to customers. This evolution is a result of industry competition and fulfilment of end user needs.

In such an evolving environment then it is worth at least considering whether CS2 and CS4 should remain as separate clearing streams or as CS2 morphs into same-day, non repudiated payments then a re-configuration of CS2 and CS4 could occur. Of course this would have issues in regard to direct debits which would need to be addressed.

### **System Architecture**

Overall the concept of hubs for payments infrastructure is a favourable concept and addresses some of the considerations above. The use of hubs conceptually allows for a broad range of institutions to participate therefore driving greater competition and presumably increasing the overall efficiency in the payments system. Options relating to a hub incorporating current or future clearing streams fundamentally has merit however this needs to be balanced against high investment cost versus alternative structures.

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<sup>1</sup> APCA website ([www.apca.com.au](http://www.apca.com.au))

## **Section 4 - Innovation Gaps in the Australian Payment System**

“In its 36 page-long discussion paper, the Reserve Bank said it aimed to identify current or emerging gaps in the payment system, and any barriers to necessary innovation.

The Review focused on retail payment systems used by consumers and most businesses, and highlighted timeliness, accessibility, ease of use and integration, pricing, safety and reliability as chief end-user concerns”

*Itnews, 4 July 2011*

We note the RBA during the course of its consultation process have identified a number of potential areas of innovation gaps in the Australian Payments System. It is our understanding that the major question considered by the RBA in relation to these innovation gaps is if, either now or in the future, the needs of end users are not being met then is greater co-ordination of an industry agenda required to address such gaps.

We will deal with each of the potential innovation gaps outlined as follows:

### **Transmission of Data with Payments**

NAB acknowledges the RBA’s comments regarding the difficulty in transmitting additional data with payments in Australia, in particular that current payment systems do not facilitate information about the payment. We recognise that this is an issue for Australian business and of particular significance for certain industries such as the superannuation industry. We also believe it perpetuates the use of cheques as the alternatives available do not embed reconciliation information with the payment

A solution to this issue requires an extended (expensive and slow) infrastructure to support describing payments, particularly those less regular (i.e. not salary or other repeat payments) that require further description as to the reason for the payment. The current systems for payments such as in health/welfare, superannuation and insurance, do not facilitate information about the payment and as such a whole separate process is required for this. This would require significant cost, time and effort to achieve.

One of the options facing the industry is whether there is a case for reengineering the DE system. Such a reengineering would certainly be a costly exercise for industry participants. As such we believe a potential solution could be using the existing 18 characters in DE as a referencing mechanism pointing to another data stream. This could be a good interim solution as proprietary systems that may already be in existence or potentially developed in the future by industry participants may be utilised.

Carrying the information with the payment – either directly in a large data packet, or indirectly via a URL would assist in the efficiency of this process.

As a general principle the implementation of global messaging standards is appealing and is an emerging global trend. Australia’s alignment to global payment standards will over time result in an increase in efficiency of the payments activity.

Having a richer payment message data format compatible with the standards being adopted globally is a clear priority to better facilitate clearing international instructions within the domestic payments market in Australia.

However existing bank systems require change to adopt these new data standards and this again requires time, effort and funding.

The use of global standards, which are supported within major core systems of the major software providers, would allow for the ability for innovation to be automatically incorporated.

### **Timeliness of Payments**

Consumer customers want secure and easy access to their funds. For low value payments they seek a minimum level of security and checking that will increase the speed to send and receive funds. More recently this has resulted in greater usage of contactless payment methods and online funds transfers.

Business customers who are increasingly migrating to electronic payments with added requirements for quick access to funds also require a higher level of security. Business customers due to their high volume of payments require associated reconciliation options attached to payment instruments. It is noted however that business customers, particularly those operating in an on-line environment, require confirmation that a non-repudiated payment has been made and value will be received but not necessarily that value is required immediately.

It is NAB's view that as most payments continue to evolve to electronic means both consumer and business customer will expect within day access to credit funds received. We believe customers will be likely to place less priority on debit funds transferred although there is clearly a dependency between the two.

### **Timing of Availability of funds and Real-time Confirmation of Payments**

Overall, we are supportive of a move to same day access to funds and same day settlement for payments exchanged up to a certain cut-off time of the day e.g. all payments received up to 4.30pm each day. If the requirement was to allow settlement of the funds exchanged later in the day this would have the potential to limit competition and increase barriers to entry for smaller industry players whose overheads of those participating in late RITS sessions would not be cost effective. The industry needs to ensure that any changes do not disadvantage the smaller industry players. Potentially a review of membership categories within APCA would be prudent.

However there are a number of issues which are required to be fully addressed.

It is difficult to undo the timing of posting and settlement from financial institutions historical frameworks. The concept of accelerated posting of inward direct entry items from other financial institutions was moot before the introduction of multiple clearing exchange times. Processing systems were developed for the original timing of clear once a day => post to customer accounts overnight => settle the next morning at 9am.

An extended time between “posting” value to a customer’s account and settlement (the settlement risk period) may not be the primary obstacle for moving to accelerated posting of low value payments. However processing systems of financial institutions would have to be changed to accelerate posting of all bulk electronic transactions inward and outward. Because account updating is part of core system processing, most financial institutions will prefer to incorporate any accelerated posting changes in core system replacement programmes.

Additionally there are a number of cost factors which would be required for intra-day settlement of batch payments:

- Servicing Tier 2 banks – the current once a day settlement process would need to be completed regularly throughout the day if intraday settlement is introduced. Tier 2 bank balances would have to be cleared same day which would require system investment by the Tier 1 and Tier 2 institutions. There would also be funding issues for Tier 2 banks late into the evening as they need to cover their obligations to their Tier 1 appointer.
- Increased resourcing – additional staffing requirements for Cash traders, Repo traders, CLS/Cash Operations staff, credit staff, interbank settlement reconciliation staff and technology support. BCP issues related to after hours dealing and appropriate back-up.
- Open Market Costs - would need to leave ESA balance longer each night. There would be an increased risk of needing to access the RBA overnight repo facility more regularly.
- Overnight Funding mismatches - While some clearing systems remain on net deferred and others go to same day settlement, there is potential for overnight funding mismatches occurring more often and in larger volumes. While this does not necessarily have a tangible cost it does add funding uncertainty and liquidity risk, and potentially higher average credit exposures on a daily basis between the banks.
- Intraday Funding mismatches - With file exchanges being unequal in size throughout the day and often heavily back-loaded into the last two exchanges, banks will require sufficient time between exchange and settlement to enable cash dealers to complete funding. At the moment cash dealers have at least 75 minutes to complete funding of the 9am batch on an intraday basis and all day on an overnight/term basis. If the settlement window allowed is too short (e.g. 30 minutes) financial institutions would have to attempt to create forecasting models of file exchange totals for each exchange well ahead of the due settlement window. The benefit of netting – which alleviates settlement and liquidity risk efficiently, is reduced when a move from 9am batch settlements to multiple time critical real time batch file settlements. This may be exacerbated when other clearing streams remain net deferred to one settlement.
- Reconciliation mismatches – while the amount for reconciliation is reduced the number of reconciliations increase. The potential for differences increases, particularly in the event of a processing difficulty of returns and refusals (the most common type of processing difficulty).
- Processing system changes – intraday settlement requires changes to transaction acceptance, exchange, posting/account updating, funds checking,

settlement, reconciliation and exception (decision to pay) systems as the process flows and timings of each of these steps will change.

Giving consideration to the current state of the paper system, which is currently subject to public and government consultation on its long term viability, is important. There is also a question mark over whether there is any material advantage in having intraday settlement of paper if funds are not going to be available significantly earlier due to the normal cheque clearing cycle. It would be better to seek alternative replacement products than apply intraday settlement to APCS.

One of the issues raised by the RBA is in relation to a move to a 7 day cycle. NAB has considered this option and provides the following comments:

The benefit of a 7 day cycle depends on whether weekend processing includes all of clearing, settlement and posting.

Understanding how weekend processing would work is essential before any policy position could be reached on this. Initial reaction from a clearing perspective may be positive, but there are fundamental questions at an execution layer that need to be explored:

- If file transfers are required would there be funding requirements as well? If there were funding requirements this would then require cash and repo markets to open and add significant costs to the business.
- What is the industry looking to achieve with a move to 7 day bulk electronic exchange?
- What operating hours would be defined? This would be critical to the processing and liquidity arrangements required.
- How much value would be anticipated moving from Monday settlement to weekend settlement?
- Does the settlement risk profile change if only credits are cleared and posted?
- Do payment honouring decision risks change for debits if only credits are cleared and posted over a weekend?
- What would the expected process be for GDES payments?

A move to 7 day clearing and settlement would have a detrimental effect on maintenance and 'house-keeping' hours for financial institutions. The impact on Tier 2 global institutions with 'follow the sun' processing would also need to be considered.

The change risk of moving from a 5 day clearing and settlement cycle to a 7 day clearing and settlement cycle would be substantial.

Weekend liquidity needs would have to be assessed as well as weekend resource costs. We see no benefit to extending settlement to 7 days. Ultimately this activity will be driven by client activity demand for bulk electronic processing 7 days a week.

There is no operational benefit to exchanging paper on a 7 day cycle. Costs would materially increase if physical paper was included.

However, there may be advantages if the intent is to move to ignoring State public holidays in APCS, although a question would still remain over processing on national public holidays when the RBA is closed.

We believe that in relation to any proposed changes to the timing availability of funds from a payer and payee perspective in all segments there needs to be a level playing field. On that basis an all-in solution is required. If a competitive position can be established within this framework the market will resolve any issues.

If 'Opt-in' participation is chosen there must be clear parameters in place to ensure at the very least that the major banks are all-in, preferably all Tier 1's. It would be problematic if one or more of the majors opted to delay payment and run up an exchange settlement balance intra-day.

If an Opt-in approach is taken then the customer experience is inconsistent and a 2 speed BECS system is institutionalised. Failure to Settle procedures would have to be reconstructed to take this 2 speed settlement system into account.

In summary it is NAB's view that as electronic payments continue to increase then customer expectation will increasingly demand same day access to funds.

However as in the case of NAB and for a number of Australian financial institutions the coming years will be spent on core system replacement and payments remediation that have already been identified to improve the customer experience. While these include decreasing the time to availability of funds, it is not clear in the short term that settlement of those funds is an imperative to driving change. At the same time financial institutions are conscious of increased exposure as the settlement risk period lengthens.

When determining the frequency of intraday timings then balancing the processing, liquidity and operational demands of intraday settlement will be a challenge. It is unlikely that this balance could be achieved if there were more than 4 settlement windows a day.

## **Mobile Payments**

It is NAB's view that mobile payments in the form of mobile internet and contactless are likely to increase significantly over the next few years. In the short term this will be via mobile internet, however, we expect significant growth in mobile contactless payments due to increased awareness of Near Field Contactless (NFC) technology and availability of compatible devices.

As with all developing markets there are certain impediments to growth and mobile payments in Australia is no exception. We primarily view that Australian banks are inherently reliant on SMS as a second factor of authentication for Internet Banking payments. This creates a significant challenge in the way of delivering equal functionality on a mobile device as the second factor is being sent to the device that the transaction is being initiated from. This typically limits the size of the transactions that can be performed and/or the recipients of payment to those that have been previously pre-authenticated via desktop Internet Banking.

The growing mobile market brings with it the increasing need for minimum requirements for payer and payee protection to be established for mobile payments.

As with other payment instruments the business case for innovating in payments will continue to be influenced by interchange reform. Australia has one of the lowest interchange rate structures in the world and as such makes it difficult to develop attractive business cases for payments innovation (for both scheme and non-scheme based). This is particularly evident when split issuance models (involving banks and mobile network operator) for mobile payments are considered.

### **Electronic Purse Systems**

In markets other than Australia transit has been the key enabler for electronic purse systems. It is NAB's view that a more consistent approach is required across Australia. As is evident in overseas markets, an open loop system (scheme based) may be a viable alternative for electronic purse type systems in Australia.

Certainly in this area there are potential options regarding mobile wallets which include both proprietary and partnership models.

## **Section 5 - Concluding Remarks**

NAB has welcomed the opportunity to consider some of the current issues facing the Australian Payments industry in relation to innovation and looks forward to discussing in further specificity with the RBA over the coming months.