



Australian  
Payments Council

# APPENDICES AUSTRALIAN PAYMENTS PLAN

DECEMBER 2015



# CONTENTS

1 APPENDIX 1 – INITIATIVES ALREADY UNDERWAY	2
2 APPENDIX 2 – DESIRABLE CHARACTERISTICS	4
3 APPENDIX 3 – CONSULTATION PROCESS AND OUTCOMES	5
3.1 PURPOSE OF CONSULTATION	5
3.2 CONSULTATION PROCESS	5
3.3 STAKEHOLDER FEEDBACK ON THE DESIRABLE CHARACTERISTICS	5
3.4 STAKEHOLDER FEEDBACK ON FUTURE TRENDS AND CHANGE DRIVERS	6
3.5 STAKEHOLDER FEEDBACK ON AREAS FOR FUTURE COLLABORATION	8
3.6 LIST OF STAKEHOLDERS THAT ATTENDED A FORUM/ONE-ON-ONE MEETING	9
3.7 LIST OF ORGANISATIONS/INDIVIDUALS PROVIDING WRITTEN SUBMISSIONS	10

Level 6, 14 Martin Place Sydney NSW 2000  
Telephone +61 2 9216 4888 Email [info@australianpaymentscouncil.com.au](mailto:info@australianpaymentscouncil.com.au)



### **Appendix 1:**

Provides more information on the initiatives listed in “Summary of Initiatives Already Underway” in Section 3 of the Australian Payments Plan.

### **Appendix 2:**

Provides further explanation of the “Desirable Characteristics of the Australian Payments System” in Section 1 of the Australian Payments Plan.

### **Appendix 3:**

Outlines the consultation process conducted by the Australian Payments Council to inform development of the Australian Payments Plan.

# APPENDIX 1

# Initiatives Already Underway

Initiative	Description
<b>SECURITY AND TRUST</b>	
<b>Strategy to Address Card-Not-Present Fraud</b>	APCA's fraud statistics indicate an upward trend on fraudulent card-not-present transactions. Card payments dominate online payments and are likely to for the foreseeable future. Ensuring ongoing confidence in the use of card payments will remain important for users and participants. The industry, under the Issuers and Acquirers Forum (see below), is currently investigating ways to address this issue.
<b>Australian Financial Crimes Exchange (AFCX)</b>	<p>The AFCX was established in March 2015 by Australia's four largest banks to develop mechanisms to share information and strengthen the financial and banking industry response to fraud and financial crimes.</p> <p>It is envisaged that the AFCX will be the primary channel through which the financial services industry will coordinate its intelligence and data sharing activity for fraud and cybercrime prevention and investigation. Participation in the AFCX is open to all entities, both private and public sector, affected by fraud or cybercrime.</p>
<b>Fraud in Banking Forum (FBF)</b>	The Fraud in Banking Forum, established in 2014, provides a regular setting for open dialogue between the fraud teams in Australia's financial institutions and those in the law enforcement community. The improved channels of communication between the different entities promote greater responsiveness when specific fraud events arise and foster greater understanding of strategic challenges.
<b>EMV at ATMs</b>	Australia's widespread roll-out of chip technology for payment cards and merchant terminals, together with the use of PINs is having a significant effect on reducing counterfeit/ skimming fraud. The industry is now moving away from magnetic stripe to chip-reading at ATMs to provide added security against counterfeit cards. A working group has developed rules to provide for processing of transactions using the EMV standard. Implementing EMV across the entire ATM network provides strong protection against fraudulent transactions from counterfeit cards.

Initiative	Description
<b>MANAGING AUSTRALIA'S PAYMENTS MIX</b>	
<b>New Payments Platform (NPP)</b>	<p>The NPP is being developed collaboratively by 11 authorised deposit-taking institutions and the Reserve Bank of Australia. It will provide Australian businesses and consumers with a fast, versatile, data-rich payments system for making everyday low-value payments. The basic infrastructure will support various “overlay” services – specially tailored services which individual financial institutions may choose to offer their customers. This multi-layered infrastructure has been designed to promote competition and drive innovation in payment services. It ensures the NPP will be equipped to meet the evolving needs of Australians in the digital age and beyond. The NPP remains on track to being operational in second half 2017.</p>
<b>Issuers and Acquirers Community (IAC)</b>	<p>On 1 July 2015, APCA launched a new framework for card payments, the Issuers and Acquirers Community (IAC). The IAC replaces the Consumer Electronic Clearing System (CECS), the system for debit card transactions set up by APCA in 2000. As the world of card payments becomes increasingly complex, the IAC will enable card issuers, acquirers and network operators to better manage collaboration across all card payments, including credit and charge cards, debit cards and prepaid cards, on systemic opportunities like fraud prevention.</p> <p>The Issuers and Acquirers Forum (IAF) is the name given to the committee of management that has carriage over the IAC framework.</p>
<b>ENABLING THE FUTURE</b>	
<b>Process for Considering Non-Standard Technologies at Point of Interaction</b>	<p>Rapid changes in technology have given rise to new entrants to the payments market. Many product innovations meet existing standards; however some proposed solutions adopt a non-standard approach to protecting payment information. The process for considering non-standard technologies at point of interaction has been established by the IAF. The process aims to encourage innovation, while limiting the potential for fraud. It also ensures a consistent industry response.</p>
<b>Third Party Access</b>	<p>A working group has been established to look at the issue of access by third party service providers to customer accounts. This work recognises the need to support new entrants to the payments market, while ensuring new services do not undermine the existing security. The working group is developing a voluntary industry code setting out minimum safety and security standards that new service providers must agree to, before being permitted to access customers’ accounts through financial institution websites.</p>
<b>Digital Wallet Technical Security Standards</b>	<p>Mobile wallet applications – as digital substitutes for physical wallets – have the capacity to deliver an integrated and frictionless payments experience for Australian consumers. A special purpose committee has been established to develop draft industry security requirements and an associated governance framework, for third party digital wallets in Australia, with a view to transitioning the standards to the IAC for industry adoption in 2016. The standards will promote openness, interoperability and functionality security of digital wallet solutions for the benefit of Australian consumers; and establish a liability framework that preserves consumers’ confidence and trust in payments systems and products.</p>

## APPENDIX 2

# Desirable Characteristics

The Payments Council believes that what we want from our payments system can be articulated in the form of “Desirable Characteristics”.

These desirable characteristics act as a guide for the evolution of the Australian payments system and the activities of the Payments Council. The strategies and initiatives outlined in the Plan are designed to drive the system towards achieving these desirable characteristics as the environment around us continues to change.

The desirable characteristics also provide criteria for assessing how well the Australian payments system is performing, in order to direct review, refinement and future decision-making.

The Payments Council believes that the desirable characteristics of the payments system can be summarised as Resilience, Efficiency, Accessibility and Adaptability and this was supported through the consultation. The underlying definitions were modified through the consultation process, resulting in a greater recognition of trust, choice, transparency, collaboration and flexibility. Aspects of the four desirable characteristics are provided below.

<b>RESILIENCE</b>	
<b>Stability</b>	Payments infrastructure is certain and predictable and provides a basis for delivery of well-defined and valued payment services to users through operators and service providers.
<b>Reliability</b>	Payment services are available when users, service providers and operators want them, and outages are minimised.
<b>Security</b>	The system is structured to protect against unauthorised access to value and data.
<b>Trust</b>	Users and participants maintain confidence in, and continue to use and participate in, the system.
<b>EFFICIENCY</b>	
<b>Resource allocation</b>	Finite system resources are allocated for maximum stakeholder value.
<b>Sustainability</b>	Operators and service providers are able to develop and maintain sustainable business models.
<b>Integration</b>	Interoperability, standardised, automated processes and straight-through processing is sought to minimise costs and risk.
<b>Liquidity</b>	Value circulates rapidly at minimal friction cost.
<b>ACCESSIBILITY</b>	
<b>Ease of Access</b>	Consumers and businesses have access to a range of user-friendly payment services so they can choose how to make and receive payments.
<b>Reach</b>	The payments system is widely accessible amongst users, so that payers can reach payees.
<b>Competitiveness/ Choice</b>	Service providers and operators have equitable access to underlying infrastructure so as to promote competition and choice throughout the system.
<b>Transparency</b>	Users, providers and operators have visibility of the costs, rights and obligations associated with actions they undertake.
<b>ADAPTABILITY</b>	
<b>Innovation</b>	Innovation in payment networks and payment services is encouraged, so that changing user needs are met over time.
<b>Collaboration</b>	Where there are strong network effects, governance frameworks encourage operators and service providers to cooperate to bring about payments system improvements.
<b>Regulatory clarity</b>	Regulation (including self-regulation and industry standards) is clear, up to date and supportive of both cooperation and competition.
<b>Flexibility</b>	The system is responsive to the desire of service providers and operators to introduce new technologies and new business models.

## APPENDIX 3

# Consultation Process and Outcomes

### 3.1 Purpose of Consultation

The consultation process sought to understand the views of all users of the payments system. While the way that we pay is not necessarily at the forefront of everyone's mind, the payments system itself is an integral part of a successful economy.

For this reason, a wide range of stakeholders was engaged in the consultation process, from the Payments Community to government, business and consumers. The views expressed have been foundational in the development of the Australian Payments Plan.

### 3.2 Consultation Process

The Australian Payments Council and members of the Payments Community developed a set of Desirable Characteristics, as detailed in Appendix 2.

These Desirable Characteristics formed the basis of the Consultation Paper<sup>1</sup> which was issued on 25 May 2015 on the Australian Payments Council website and notified through a media release.

The Council invited four groups of stakeholders to take part in the consultation process:

- Payments Community: including financial institutions, card schemes, major retailers and other payments service providers, APCA and the Reserve Bank of Australia.
- Technical Experts: nominated by the members of the Payments Community.
- APCA Stakeholder Forum members: non-APCA members who participate in the payments system. This includes representatives of user groups and providers of payments-related services.
- General Stakeholders: members of representative groups that are interested in payments-related issues.

Additionally, members of the public were invited to respond.

The Council also held nine face-to-face meetings with stakeholders from seven organisations that were unable to attend the Forums. Twenty written submissions were received by mid-July 2015. Public submissions are available on the Australian Payments Council website.

In June 2015, three Forum meetings were hosted in Sydney, attended by 98 people from 62 organisations. Lance Blockley from RFI Consulting facilitated the following Forums:

- Industry Experts Working Group consisting of experts nominated by Payments Community members;
- Wider non-member stakeholder group; and
- APCA Stakeholder Forum members

A list of attendees is detailed in 3.6 and 3.7.

### 3.3 Stakeholder Feedback on the Desirable Characteristics

A summary of consultation input follows.

#### **Near unanimous support for the four characteristics:**

Nearly all respondents supported the desirable characteristics. Some refinements and suggested additions were put forward, including:

- They should reflect 'competitive neutrality' and the need for fairness and equality in the treatment of participants and potential participants across the payments system.
- They should reflect 'clarity', encompassing a range of activities that relate to future planning, collaboration and governance in the payments system.

<sup>1</sup> [Australian Payments Council](#).

## 3 – Appendix 3

# Consultation Process and Outcomes (continued)

- They should reflect ‘equity’ to ensure the costs of the payments system are shared fairly. For example: low-income users should not bear an unfair burden of charges; for system participants, equity could refer to ensuring that costs are apportioned fairly to reflect both initial investment by incumbents as well as investment in innovation and new services; equity of new entrant access, and; consumers having access to information to enable informed choices.
- They should reflect the importance of considering stakeholders outside of the payments system.
- To avoid singular focus on industry requirements, it was suggested the characteristics should reflect ‘customer needs and transparency’.
- Within the characteristic of resilience, the need for ‘scalability’ was identified given the likely increased demand for data exchange between financial institutions and their clients.
- The desirable characteristics should reflect the importance of ‘data ownership’, with concern expressed about consumer rights and access to personal data held by third parties.

### **Desirable characteristics were not equal and could be prioritised:**

A few respondents saw a hierarchy, suggesting that resilience was the most important characteristic. One view was that an important element of resilience was its strength to withstand external shocks and the existence of alternatives in the event of a catastrophic failure.

## 3.4 Stakeholder Feedback on Future Trends and Change Drivers

A summary of consultation feedback on current and longer-term trends, and on digital disruption being the primary force of change to Australia’s payment systems follows. This includes written responses to Question 2, 3 and 6 in the Consultation document, all of which focused on future trends and change drivers. It is important to note that there was general agreement with the future trends identified in the Consultation Paper.

**Increasing customer expectations:** An overarching common trend identified was the desire by customers for more convenience and lower costs. The increasing complexity and range of products available to consumers will, according to a few respondents, lead to the need for more information to be made available to help customers make informed choices.

**Digital disruption:** Nearly all respondents agreed that digital disruption would be the primary force for change in the future. Many cited the increased disintermediation of financial institutions where the role of the traditional banks in payments could be challenged by new entrants. The growth of ‘internet economics’ was viewed as placing increasing stress on traditional banking as well as regulatory and competitive oversight and consumer protection. Some linked this to the challenges emerging from globalisation, cross-border payments, economic and financial integration and standardisation, as reflected in the following quote:

*“Consumer data protection, transparency requirements, financial inclusion, financial crime compliance, regional harmonisation are all impacting the payment landscape.”*

Other feedback from consultation on digital disruption included:

- Digital disruption is more likely to occur on interfaces and channels as opposed to the payments infrastructure. The infrastructures are likely to remain stable and potentially rationalised in the future. Many developments are likely to occur on the existing infrastructure and will therefore not be truly disruptive.
- Disruptors are likely to come from a wide range of sources, including those arising from the New Payments Platform, from increased regulation, global standards as well as the provision of enhanced services through apps. One respondent noted that the concept of self-disruption by incumbents disrupting themselves can also be a source of innovation. The emergence of innovation through “FinTech” start-ups is likely to bring a need to bring these entities into the mainstream payments system and the rise of non-banking institutions will continue to have an impact.

- The emerging trend of block chain technology being used in payments should be considered in the Plan as it delivers the possibility of convenience and lower costs, particularly for cross-border transactions.
- One respondent suggested that competition causes digital disruption and is therefore the primary force for change. Another suggested that digital 'innovation' is a better description than digital 'disruption'.
- Collaborative investment in payments innovation was raised as a challenge, with the need for viable business models to justify investment.

#### **Payments evolution:**

- There is likely to be increased regulatory pressure seeking domestic and global parity.
- The impacts of increased globalisation (including real time low value payments) and global regulation were future trends that need consideration.
- There will be consolidation of existing payments methods and infrastructure, but an expansion of channels and choices.
- Other trends cited by respondents include the rise of mobile payments and cloud-based infrastructure, cyber-crime, third party authentication as well the increasing role of tokenisation.
- One view was that as mobile devices become more essential to accessing digital payments, they will become utility instruments that all citizens will be entitled to own. Technology will enable an increased range of businesses to 'plug and play' onto various networks.
- Many saw demographic and generational changes as contributing to a shift away from traditional banking institutions. This was also seen through changes in the needs of customers and businesses that are occurring beyond the payments system.
- The trend towards real-time payments will continue, with many respondents predicting that there will be expanding choices and the globalisation of services.
- The move towards electronic and digital payments will impact legacy payments: respondents saw no cheques in the future, more online commerce, increasing regulation of cash, and fewer ATMs.

Additional comments include:

- There was general agreement that cheques would not exist in the future in their current form – if at all. Several respondents suggested the declining use of cheques is an important trend and that there needs to be a coordinated approach to managing an exit from cheques.
- A lot less cash payments will occur and the impact of this may need consideration, including on ATMs.
- The future of the direct entry system was unclear, dependant to a great deal on the success of the New Payments Platform.
- The reliance on plastic cards is likely to decrease, and cards could ultimately end up as a fall-back instrument.

**Security and fraud prevention:** All respondents saw the continuing fight against fraud as a key area. Many saw increasing risks associated with globalisation, with more service providers and merchants that interact with Australian payments being based overseas. Other feedback included:

- Security was the biggest challenge as it poses a significant threat to future payments innovation and adoption, which will only successfully occur if there is consumer confidence in the service.
- The balance between convenience and security/privacy will become a significant issue, along with ensuring appropriate consumer control and privacy. To provide convenience, security will have to be viewed by consumers as simple and may need to be embedded and operate "below the surface" (rather than require users to provide PINs and passwords etc).
- It was suggested that tokenisation would become more prevalent and routinely replace card numbers in a transaction.

**Data:** A clear emerging trend was the greater importance of data. The ownership, control and management of data will become a greater challenge as the value of data increases. Many saw the issue of data becoming more important, particularly about the ownership, control and monetisation of data. Consumer rights in relation to data ownership will need to be considered in the future.

## 3 – Appendix 3

# Consultation Process and Outcomes (continued)

**Digital Identity:** An area consistently referenced was the security, ownership and control of digital identity and its use in payments – all of which were considered to be of high importance to payments in the future.

**Open APIs:** It was suggested that the demand to provide open APIs would increase and require the development of appropriate standards. This was associated with a view that interoperability of systems will become increasingly essential to promote innovation and expansion of services.

**Crypto-currencies:** It was uniformly predicted that crypto-currencies would continue to develop but could be most successful in cross border transactions. Many predicted that block chain technology would develop separately and provide a future source for payments innovation.

**Regulation:** There was general agreement that there would be a push for globalisation of payments regulation. One view was that national regulators would encourage domestic incumbents to compete with services provided by unregulated new entrants so as to promote stability and security. The importance of regulatory consistency was stressed – particularly in relation to ensuring overseas operations are subject to the same regulatory control as domestic services. Another regulatory issue raised was the challenge of new entrants under the current framework, arguing that government control and ownership of clearing systems was required to ensure fair access and less commerciality.

## 3.5 Stakeholder Feedback on Areas for Future Collaboration

Consultation participants provided their views on which issues might require a collaborative response. These are detailed below.

**General view of collaboration and necessity of broad stakeholder involvement:** A common response was that the payments industry needed to include a wider range of stakeholder groups in many of the areas identified for future collaboration, including collaboration with stakeholders outside the traditional payments sphere. One suggestion was to add rigour to the collaborative process by establishing a collaborative framework with an objective guide to defining areas for future collaboration.

**Areas of strong interest in collaboration:** Three strong and consistent themes emerged for areas that require high levels of collaboration: security and trust, managing Australia's payments mix, and managing digital identify verification. Information on these three follows.

**Security and trust:** This was widely cited as an area where greater cooperation would be highly beneficial. Collaboration should occur both within the payments industry and with external stakeholders, especially law enforcement agencies. Preventing fraud was not seen as a competitive issues and transparent sharing of fraud data would be beneficial. Taking a standardised approach would be advisable.

**Managing Australia's payments mix:** dealing with the range of clearing systems, the decline of cheques, ATMs/cash and, to a lesser degree, the future of direct entry was another consistently mentioned area that would benefit from greater collaboration. Within this, a number of participants expressed the view that to ensure a coordinated end to cheques, a collective approach spanning the payments industry and government would help resolve any challenges.

**Digital Identity:** The development of a digital identity ecosystem for Australia was commonly supported. It was recognised that this will require collaboration with a wider set of stakeholders such as Government and Telco's. Associated with this was a call to explore standards for biometrics and behavioural metrics.

**Consistently supported areas for collaboration:** Five areas were consistently cited as areas that would benefit from increased collaboration: standards, data management, regulation, access and consumer education. Information on these areas follows.

**Standards:** Collaboration on payments standards was considered important. Messaging standards, in particular ISO 20022, was cited as an important area for continued collaboration. The standardisation of open APIs was raised as being essential to encourage innovation and reduce costs.

**Data management:** A collective and more standardised approach to data management, for instance on issues such as privacy and authentication, was frequently suggested. It was noted that it would be important to provide clarity on the boundary between competitive and collaborative spaces. It was widely acknowledged that data management will become increasingly important, bringing with it issues such as the importance of consumers making informed choices on the implications of disclosing personal information, and the need to prevent the use of data to discriminate.

**Regulation:** Greater collaboration and dialogue between the regulator and industry would promote an open and transparent agenda. One respondent suggested the development of principles for regulation:

*“As important as it is to ensure that users have the information they need to make informed decisions in an increasingly complex payments market, it is similarly important for industry to help the regulators understand the businesses they regulate.”*

The issue of legal continuity and consistency was considered important, as stakeholders needed to be satisfied that payment choices, business decisions and strategies would not be continually undermined by constant regulatory change.

**Access:** Collaboration would help ensure new entrants have access to Australia's payment systems.

**Education:** Some respondents called for greater collaboration in consumer education and saw a role for the Payments Council, as an independent body, in designing effective disclosure procedures and providing assistance to consumers to deal with complexity and increased choice. However, a counterview is that providers of payments services have effectively educated consumers on industry-wide changes and new technologies and that there was little more needed to be done in this area.

## 3.6 List of Stakeholders that Attended a Forum/One-on-one Meeting

### Financial Institutions

Australia and New Zealand Banking Group Limited  
Bank of America National Association  
Citigroup Pty Limited  
Commonwealth Bank of Australia  
Cuscal Limited  
HSBC Bank Australia Limited  
ING Bank (Australia) Limited  
JPMorgan Chase Bank, National Association  
Macquarie Bank Limited  
NAB  
Suncorp-Metway Ltd  
The Bank of Tokyo - Mitsubishi UFJ Ltd  
Westpac Banking Corporation

### Card Schemes

American Express Australia Limited  
MasterCard Asia/Pacific (Australia) Pty Ltd  
Visa

### Industry and Consumer Groups

ATM Industry Association  
Chair APCA Stakeholder Forum  
CHOICE  
COBA

## 3 – Appendix 3

### Consultation Process and Outcomes (continued)

#### **Service and Technology Providers**

Bottomline Technologies  
BPay Pty Ltd  
CashWerkz Pty Ltd  
Clear2Pay APAC Pty Ltd  
CSC Australia  
eftpos Payments Australia Limited  
Equinix  
Ezidebit Pty Ltd  
First Data International  
FIS Australasia Pty Ltd  
Fuji Xerox Australia Pty Limited  
Fundtech  
GE Capital Finance Australasia Pty Ltd  
IGO Direct Group  
Indue Limited  
Integrated Research (IR)  
NICE Actimize  
Optus  
PayPal Australia Pty Ltd  
Quest Payment Systems Pty Ltd  
Ripple Labs, Inc.  
RSA, The Security Division of EMC  
Stone and Chalk  
SWIFT  
Tech Mahindra Limited  
Telstra  
The BPAY Group  
Transacumen  
Tyro Payments Limited  
Wincor Nixdorf Australia Pty Ltd  
Wipro Limited

#### **Regulators**

ASIC  
Reserve Bank of Australia

#### **Consultants and Academics**

KPMG  
Polaris Consulting and Services Ltd  
RFI Group  
Swinburne University  
University of New South Wales

#### **Merchants**

Coles Group Limited  
Woolworths Limited

#### **Government**

Australia Post  
Australian Taxation Office  
Service NSW

## 3.7 List of Organisations/ Individuals Providing Written Submissions

#### **Financial Institutions**

ANZ Bank Ltd  
CBA Bank  
ING  
NAB

#### **Service and Technology Providers**

BPAY Australia Ltd  
Eftpos  
First Data  
Indue  
Controlabill  
SWIFT  
Tyro

#### **Industry and Consumer Groups**

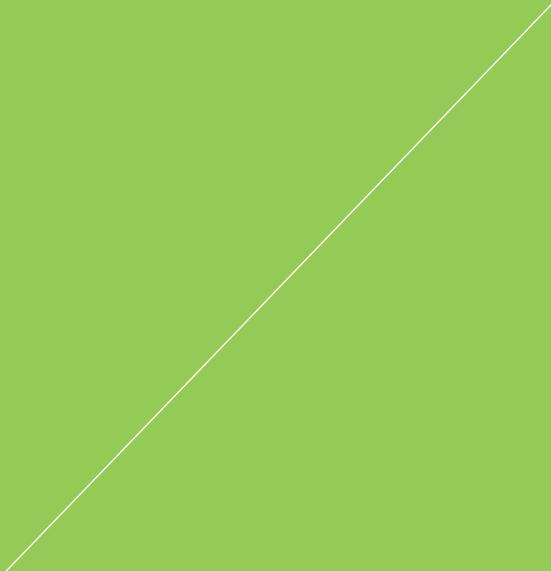
Consumer Action Law Centre  
Real Estate Institute of Australia

#### **Consultants and Academics**

Deloitte  
KPMG  
Swinburne University  
University of New South Wales

#### **Government**

Service NSW



## CONTACT

LEVEL 6, 14 MARTIN PLACE SYDNEY NSW 2000  
TELEPHONE +61 2 9216 4888  
EMAIL [INFO@AUSTRALIANPAYMENTSCOUNCIL.COM.AU](mailto:INFO@AUSTRALIANPAYMENTSCOUNCIL.COM.AU)



