

# Financial System Inquiry Submission



**March 2014**

# Contents

<b>Executive Summary</b> .....	3
<b>Introduction</b> .....	4
<b>Refreshing the philosophy principles and objectives underpinning the development of a well functioning financial system (Terms of Reference Section 2)</b>	
Improving definitions within the financial system.....	5
How risk is managed .....	6
The role of Government.....	7
<b>Emerging opportunities and challenges that are likely to drive further change in the global and domestic financial system (Terms of Reference 3)</b>	
Point of Sale Evolution .....	8
Biometrics in payments .....	8
Virtual currencies .....	9
Digital wallets.....	9
Benefits of a cashless society.....	10
International financial regulation .....	11
<b>Promoting a competitive and stable financial system that contributes to Australia’s productive growth (Terms of Reference 4)</b>	
Open Access to Payments system .....	13
Arbitrary scheme rules.....	13
Security .....	15
Technology neutrality .....	15
<b>Conclusion &amp; Recommendations</b> .....	17

## **Executive Summary**

The Financial System Inquiry provides a timely opportunity for Australia, as a leader in the adoption of technology, to be at the forefront of financial system regulation, to enable a competitive, dynamic and innovative sector.

While today's regulatory framework has served Australia well thus far, PayPal is convinced that a revised framework needs to be implemented that is future proof, has longevity and encourages innovation across a level playing field.

Over the last twenty years, the financial system has changed immensely, and although Australia's financial system is stable, it has not necessarily kept up-to-date with new technologies, marketing innovations and changing consumer preferences and demography.

Australia has become an early adopter of many of these technological advances. The increasing prevalence of smartphones and ePayments, is testament to Australia's early adopter mentality.

PayPal is advocating a number of recommendations to ensure Australia is taking advantage of all the benefits that can result from a cashless society, resulting in a more competitive, innovative and dynamic financial system.

## Introduction

Founded in 1998, PayPal has been operating in Australia since 2005.

PayPal allows any business or individual to securely, conveniently and cost-effectively send and receive payments online, in-store or on mobile.

PayPal builds on the existing financial infrastructure of banks and credit card schemes to create a global, real-time payment solution. We deliver a product suited for small to medium businesses, enterprise merchants, individuals and others currently underserved by traditional payment mechanisms.

PayPal Australia is regulated by both ASIC and APRA. It holds an Australian financial services licence under the Corporations Act to provide non-cash payment facilities and an authority under the Banking Act to carry on banking business confined to providing 'purchased payment facilities'. PayPal is also a subscriber to the ePayments Code.

PayPal allows people to send and receive money without sharing financial information. With more than 5.5 million active accounts in Australia, consumers have the flexibility to pay online or with any connected mobile device.

PayPal is also investing in point of sale, enabling PayPal customers to transact in-store at select merchant partners.

Consumers can purchase goods with PayPal in 193 markets and 26 currencies around the world, enabling global ecommerce. With over 100,000 merchant partners in Australia, PayPal is an option for Australian businesses to transact online, from sole proprietors to established large merchants.

PayPal also is a significant enabler of cross border trade, enabling Australian merchants to export across the globe and offering Australian consumers more choice.<sup>1</sup> Cross border ecommerce in Australia is expected to treble from \$5 billion in 2013 to \$16.1 by 2018, with safety and trust are key drivers with 9 out of 10 claiming buyer protection is critical.

This submission will focus on the following Financial System Inquiry terms of reference:

- Refreshing the philosophy, principles and objectives underpinning the development of a well-functioning financial system;
- Emerging opportunities and challenges that are likely to drive further change in the global and domestic financial system;
- Promoting a competitive and stable financial system that contributes to Australia's productive growth.

---

<sup>1</sup> PayPal, Modern Spice Routes The Cultural Impact and Economic Opportunity of Cross-Border Shopping, 2013, [https://www.paypalmedia.com/assets/pdf/fact\\_sheet/PayPal\\_ModernSpiceRoutes\\_Report\\_Final.pdf](https://www.paypalmedia.com/assets/pdf/fact_sheet/PayPal_ModernSpiceRoutes_Report_Final.pdf)

## **Refreshing the philosophy, principles and objectives underpinning the development of a well-functioning financial system**

Since the release of the 1997 Wallis Report, the financial system has developed significantly. PayPal did not exist when the last review occurred.

The payments landscape alone has seen an incredible increase in mobile payments, with Australia having one of the highest smartphone penetration rates in the world. PayPal Australia alone processes one in three payments on the mobile device.

We have seen more competition in payments in the past three years than in the previous thirty with the introduction of ePayments.<sup>2</sup>

ePayments cover a range of payment methods including online payments, mobile banking, and credit card transactions.

New players and business models are revolutionising the industry, however the regulatory environment supporting this industry and its consumers has challenged to keep pace and adjust to this changing marketplace appropriately.

PayPal acknowledges that the key challenge for regulation is to balance the needs of protecting consumers and combating fraud while providing an environment for innovation in the industry. It is within this context that PayPal provides the following observations and comments.

### **Improving definitions within the financial system**

The PayPal product provides a means to send and receive non-cash payment payments between customers with a PayPal account. To send payments, a customer is required to use an existing funding source (such as their credit/debit card or bank account) or access a stored balance held in their PayPal account. The majority of PayPal's customers do not hold a stored balance. The PayPal product is not an investment product and no interest is payable on the stored balance component of the PayPal product. The PayPal product is simple, easy-to-use, well understood by customers and is a means to send and receive non-cash payments between customers with a PayPal account without any loss of capital.

PayPal holds an Australian financial services (AFS) licence to provide general product advice in respect of, and to deal in, non-cash payment facility products.

PayPal is also regulated by APRA as an authorised deposit-taking institution limited to providing a purchased payment facility (PPF Provider). As a PPF Provider, PayPal is subject to the requirements of the *Banking Act 1959* and the prudential supervision of APRA.

PayPal relies on the existing financial infrastructure of credit/debit cards and bank accounts in order to fund purchases.

Under Australian law, the term "financial product" is defined very broadly to cover facilities through which a person making a financial investment, manages financial risk or makes non-cash payments.

---

<sup>2</sup> Banking on the high tech, Australian Financial Review, 20 February 2014, quote attributed to Jeff Clementz, Managing Director PayPal Australia

There are also a number of financial products that are currently not regulated as "financial products".

The review should consider in more depth the emergence of new technologies and payment methods and particularly whether the definition of a financial product warrants review.

### **How risk is managed**

Big data has been the catalyst for spotting trends and this information has been used for a variety of applications from preventing disease, improving government services, helping deliver pinpoint marketing and advertising to combating crime.

PayPal is calling for big data to be used for better policy making<sup>3</sup>, in particular, help develop better regulations for the payments sector which has expanded its breadth in the past decade due to the rapid development and uptake of technology.

The idea is simple: utilise the same data analytics techniques and performance-based metrics that are driving progress in nearly every industry to improve the regulatory decision-making process.

The intention of payments regulation is widely shared; to combat money laundering and fraud. There is disagreement, though, about how the existing regulatory process can be enhanced to better achieve these goals.

Current payments regulations generally utilize rigid design standards – that specify requirements and impose particular business practices on innovative businesses – and a methodology that cannot iterate with rapid developments in industry.

Take for example the issue of Know Your Customer and how it may be applied in certain instances. The process involves collection of information such as: name; date and place of birth; and whenever possible, relevant information on the address of the identified person. Identification must be verified by means of a supporting document; this means a copy of an identity card or passport, and that information is then cross referenced with existing data to verify the transaction.

Yet, the required data points collected, while important, tell us nothing about a range of risk factors, including but not limited to: a person's relationships with any other person; whatever constitutes 'normal behaviour' for the identified person; and who that person is in terms of political life.

Today, modern payment services are looking at the entire electronic and biometric footprint of people when determining identity. Regulations need to do the same.

PayPal is advocating for the use of SMART Governance which combines the use of technology and data with a collaborative and iterative process to measure performance of covered entities, creating a better informed regulatory development process.

This new way of regulating will further stimulate innovation, increase competition, promote financial inclusion, improve transparency, and provide access to new markets.

---

<sup>3</sup> PayPal, Payments Regulation for Asia Pacific, October 2013, <http://www.ebaymainstreet.com/sites/default/files/PayPal-Payment-Regulations-Booklet-APAC.pdf>

## The role of Government

PayPal believes there is more work to be done towards improved governance and regulatory supervision within Australia.

In particular, PayPal supports the government improving the co-ordination of regulatory agencies which may have overlapping jurisdiction in the payments system by reviewing existing developments and ensuring closer co-ordination and co-operation. This engagement will help provide more clarity for regulated entities and consumers. This is not to suggest a replacement of existing functions, but to enhance the framework.

In Canada, The Department of Finance, Office of the Superintendent of Financial Institutions, the Canada Deposit Insurance Corporation, the Financial Consumer Agency of Canada and the Bank of Canada (Central Bank) participate in the Financial Institutions Supervisory Committee, first established in 1987. This body shares information, coordinates actions, and advises government on financial system issues.

In 2013, the Indian Government's Report of the Financial Sector Legislative Reforms Commission has advised a set of changes to merge some existing regulators. For example, they involve maintaining the role of the Reserve Bank of India, while bringing together Securities and Exchange Board of India, Forward Markets Commission, Insurance Regulatory and Development Authority and Pension Fund Regulatory and Development Authority into a Unified Financial Regulator, as well as other changes.<sup>4</sup>

In Australia, The Council of Financial Regulators (CFR) chaired by the Reserve Bank of Australia became the coordinating body for Australia's main financial regulatory agencies in 1998 following the Wallis report. It is a non-statutory body whose role is to contribute to the efficiency and effectiveness of financial regulation and to promote stability of the Australian financial system. Its membership comprises the Reserve Bank of Australia; the Australian Prudential Regulation Authority (APRA); the Australian Securities and Investments Commission (ASIC); and the Treasury. The Council meets in person quarterly or more often if circumstances require it.

PayPal is of the view the CFR should be expanded to include the Australian Transaction Reports and Analysis Centre (AUSTRAC), and the Attorney-General's Department, being bodies which draft and enforce legislation around AML/CTF requirements, a key regulatory issue and operational overhead in relation to payments. PayPal also recommends that consideration be given to the Australian Consumer and Competition Commission participating in the CFR on a needs basis, particularly on matters that can best deal with matters of concentration of market share.

---

<sup>4</sup> Government of India, Report of the Financial Sector Legislative Reforms Commission, March 2013

## **Emerging opportunities and challenges that are likely to drive further change in the global and domestic financial system**

### **Point of Sale Evolution**

Point of Sale (POS), meaning the technologies, processes and services supporting consumer/merchant interaction in-store, is poised to undergo profound transformation in the next several years. The proliferation of mobile devices, the transition of back-office systems to the cloud and the emergence of new customer and merchant experiences that will be created by developers, will drive rapid changes in consumer behaviour.

These changes will occur against a backdrop of innovation in underlying POS business models, especially the emergence of data-driven business models, which represents a significant shift for the industry. The competencies required to succeed with data-driven business models centred on integrated platforms are outside the current scope of many incumbent POS providers, setting the stage for a new set of providers.

Many of these emerging players will focus on serving the broader needs of merchants beyond POS, including integration of in-store sensors and mobile devices to drive customer/ product interactions, and back-office systems like inventory and supply chain management. The deeper integration between POS and back-office systems makes the future of POS and the future of retail inextricably intertwined. Together, they will ultimately offer merchants unique in-store opportunities to engage customers in deeply personalized ways.<sup>5</sup>

Several new entrants have recently developed low cost mobile payments solutions enabling more businesses to accept payments on the go. These devices have transformed smartphones and tablets into payment terminals offering a range of value adds (eg loyalty) and sometimes replacing the cash register.

This hardware transformation is even more remarkable since neither smartphones nor tablets were initially intended by mobile device vendors to be used as POS terminals. This transformation is also driving additional hardware innovation such as Bluetooth-connected handheld barcode scanners, discreet in-store sensors to identify customers, on-cart customer tracking and checkout devices, and the proliferation of in-store tablets to provide better customer engagement. Even more important, hardware innovation is driving a symbiotic acceleration of software innovation in order to connect and leverage all the different types of hardware, peripherals, and sensors now available.

It is anticipated that this transformation will be enabled by low cost barriers to adoption and increased agility on business and consumer adoption and benefit delivery.

The Inquiry should consider these developments in changing consumer preferences and promoting a regulatory environment conducive to this rapid technological change

### **Biometrics in payments**

Recently, PayPal and Samsung have announced a collaboration that will allow Samsung Galaxy S5 users to be able to login and shop at any merchant that accepts PayPal on mobile and in-stores with only their fingerprint.

---

<sup>5</sup> The Future of POS:Point of Sale Evolution and Its Impacts by Scott Ellison, Senior Director, Corporate Strategy and Head of Market Intelligence, PayPal

The new secure, biometric feature means Galaxy S5 users will no longer need to remember passwords or login details across millions of PayPal merchants. PayPal will be the first global payments company to support Samsung's mobile fingerprint authentication technology.

By using fingerprint authentication instead of a traditional login and password on the Samsung Galaxy S5, consumers benefit from an even more secure and seamless mobile and in-store shopping experience across the millions of merchants that accept PayPal.

PayPal is of the view that the industry will soon move beyond passwords.<sup>6</sup> This type of technology demonstrates that consumers don't need to face a trade-off between security and convenience.

Customers can use their finger to pay with PayPal from their Galaxy S5 because the Fast Identity Online (FIDO) Alliance Ready software on the device securely communicates between the fingerprint sensor on their device and PayPal's service in the cloud.

The only information the device shares with PayPal is a unique encrypted key that allows PayPal to verify the identity of the customer without having to store any biometric information on PayPal's servers.

### **Virtual currencies**

There has been significant focus on virtual currencies. Virtual currencies can be used entirely within a virtual economy, or can be used in lieu of a government issued currency to purchase goods and services in the real economy.

Examples of virtual currencies include Second Life; Linden Dollars; EVE Online; InterStellar Kredit (ISK); Bitcoins; virtual currencies within games; and some organisations exchange points (eg flights) for redemption such as gift cards.

Potential advantages of virtual currencies include: low cost of transaction; international use without currency conversion; privacy and finality of payment. Disadvantages of virtual currencies could include fluctuation in value, anonymity, uncertain regulatory status and finality of payment.

A critical issue for some virtual currencies is the issue of anonymity. PayPal does not allow anonymous payments.

This is an area which continues to warrant increased regulatory focus in particular in relation to anonymity surrounding payments.

### **Digital wallets**

A digital wallet refers to an electronic device that allows an individual to make electronic commerce transactions. This can include purchasing items on-line with a computer or using a smartphone to

---

<sup>6</sup> PayPal, Samsung enable biometric mobile, February 26 2014, [paymenthttp://www.tradearabia.com/news/MISC\\_252896.html](http://www.tradearabia.com/news/MISC_252896.html)

purchase something at a store. Increasingly, digital wallets are being made not just for basic financial transactions but to also authenticate the holder's credentials

According to Forrester, 61 percent of the population have heard of digital wallets, but only 11 percent of the population have used one.<sup>7</sup>

The emergence of the digital wallet may mean physical credit cards in their current form could be a thing of the past by 2018, as the rate of smartphone penetration increases and mobile payments become pervasive. PayPal global product Vice President Hill Ferguson believes that by 2018 digital variations of credit cards will be the norm.<sup>8</sup>

Digital wallets allow loyalty schemes and discount offers, which is something of great benefit to Australian small businesses. It also improves consumer convenience.

The increasing ubiquity of digital wallets offers consumers convenient, innovative alternatives to traditional forms of payment. In order to maintain competition and continue to offer consumers greater choice, the Inquiry should ensure that digital wallet operators have a level playing field.

### **Benefits of a cashless society**

These rapid technological developments bring to a head the potential benefits of a cashless society. ePayment benefits include costs savings, transparency, security, financial inclusion and access to new markets. Some reports have argued that cash costs society as much as 1.5% of GDP, and carries more risk, and takes more time.<sup>9</sup>

Other benefits include assisting Australian SMEs. For example, micropayments are financial transactions involving a very small sum of money which usually occur online. Micropayments are ideal for businesses that process payments in small amounts - from digital goods, online gaming, music or software downloads, to membership fees, donations or small items.

Although Australia is less cash dependant than many other economies internationally<sup>10</sup>, there are still areas in the financial system that can be improved.

Some traditional payment methods are on the decline such as cheques. In the United Kingdom the Payments Council has set a target date for closing cheque clearing in 2018.<sup>11</sup>

Although a review by the Australian Payments Clearing Association<sup>12</sup> in 2012 argued no need to consider closing Australia's cheque system despite the irreversible decline of cheques, this ought to be revisited considering the developments of technology, and more cost efficient alternatives.

---

<sup>7</sup> <http://venturebeat.com/2013/12/02/digital-wallets-paypal-amazon-and-credit-cards-are-top-contenders-not-apple-google/>

<sup>8</sup> The Australian, Physical credit cards are dying says PayPal, 19 July 2013

<sup>9</sup> MasterCard, [http://newsroom.mastercard.com/wp-content/uploads/2013/09/Cashless-Journey\\_WhitePaper\\_FINAL.pdf](http://newsroom.mastercard.com/wp-content/uploads/2013/09/Cashless-Journey_WhitePaper_FINAL.pdf)

<sup>10</sup> <http://www.dailytelegraph.com.au/news/nsw/no-dollars-makes-sense-totally-cashless-society-gains-currency-in-australia/story-fni0cx12-1226731144361>

<sup>11</sup> Payments Council, Driving Change in UK Payments, December 2009, [http://www.paymentscouncil.org.uk/files/payments\\_council/the\\_future\\_of\\_cheques\\_final\\_version.pdf](http://www.paymentscouncil.org.uk/files/payments_council/the_future_of_cheques_final_version.pdf)

<sup>12</sup> The Sydney Morning herald, Future Seen for bank cheques, May 15 2012, <http://www.smh.com.au/business/future-seen-for-bank-cheques-20120515-1yoaz.html>

According to figures by the Reserve Bank of Australia, the average cost of processing cheques is estimated at \$7.69 each, compared to less than \$1.21 for each ePayment.

### **International financial regulation**

The Internet has torn down international borders, and with it we have seen a significant increase in cross border payments.

Australian exporters and importers need to be able to efficiently settle business with suppliers and customers in ways that are easily understood and provide integrity and reliability to participants anywhere on the planet.

The Inquiry should consider ways our financial system may support small and medium Australian businesses that lack the resources to navigate multiple and varying financial systems, processes, protections and limitations to grow successfully across borders.

There also remain challenges in international financial regulation.

There are all sorts of regulation models internationally, particularly in relation to payments. These may include: money transmitter licenses; fund transfer business operator; store valued issuer; Purchased Payment Facility Provider; and many others.

The variety of regulatory regimes presents unique challenges for innovative payment providers to implement a consistent global policy.

A useful model of unified regulation has been successfully implemented in the European Union through the Payments Services Directive (PSD), which provides a single legal regulatory framework for ePayments within Europe. The PSD has established a comprehensive set of rules applicable to all payment services in the European Union. The PSD is focused on increased competition, encouraging new entrants to the market, and providing a single compliance regime for all ePayments market participants. The European Payments Council (EPC) is a working example of a central body put in place to coordinate and oversee decision-making within the European banking industry in relation to payments. The purpose of the EPC is to support and promote the development of a framework which is focused on an integrated euro payments market, in particular, defining common positions and objectives for the cooperative space of payment services.

Europe is also establishing a Single European Payments Area (SEPA). All major transaction instruments will be covered by SEPA – credit/debit cards, Internet and mobile payments, direct debits, etc. The main purposes of the integrated European payment markets are to increase competition in the industry; to build customer trust and to ensure transparency for consumers; and to stimulate innovation among businesses and entrepreneurs.

The integration and harmonisation of ePayments regulation within the region would be of significant benefit. Harmonisation would improve stability in the industry and improve regional infrastructure.

In addition, a regional approach to ePayments regulation will be beneficial because of the inherently cross border nature of modern ePayments. PayPal has previously called for the establishment of a specific ePayments Subgroup within the APEC Electronic Commerce Steering Group to consider

these matters, with the goal of establishing a detailed and consistent framework which individual regulators within each jurisdiction could use to tailor local regulations.

This group should be charged with an agenda to promote the development and use of ePayments within Asia Pacific by creating legal, regulatory and policy environments that are predictable, transparent and consistent.

As a further immediate initiative, and recognising the opportunity underpinning high economic activity between Australia and New Zealand, PayPal also recommends that the Inquiry review the Australia New Zealand Closer Economic Relations trade agreement (CER or ANZCERTA) to support more seamless support for introduction and operation of new payments services. The Trans-Tasman Outcomes Implementation Group Terms of reference include:

- Both Governments should seek to achieve economies of scale and scope in regulatory design and implementation.
- Products and services supplied in one jurisdiction should be able to be supplied in the other.

Much progress is being made between the Tasman with respect to financial services including:

- Investors and other users of financial products in Australia and New Zealand receive comparable disclosures;
- Recognised financial advisers in Australia and New Zealand are able to operate across the Tasman without the need for further approvals;
- The New Zealand and Australian corporate trustee regimes are aligned in respect of financial products; and
- Trans-Tasman financial institutions and businesses face equivalent anti-money laundering/ counter terrorism financing (AML/CTF) obligations on both sides of the Tasman

There is an opportunity to move beyond these developments and consider a single financial system regulatory standard applying to both Australia and New Zealand.

## **Promoting a competitive and stable financial system that contributes to Australia's productive growth**

### **Open Access to Payment System Infrastructure**

In order to attract investment and drive greater innovation in the Australian payments landscape, new and innovative payments companies seek more open access to domestic payments networks and a "level playing field".

Without a level playing field for small innovators and new entrants, increased competition in the sector is unlikely to be fostered. The large industry participants are only likely to support the development of infrastructure which protects their positions, which would not be in the interests of either innovation or competition.

For these reasons, PayPal considers that any significant infrastructure to support Australia's payments network should be accessible to all players industry participants, including emerging participants and new entrants.

PayPal also considers the lack of real time payments to be a pain point for Australian merchants. However, several industry players - including PayPal - have made balances to merchants available instantly. Recipients of PayPal payments can use their received funds in real time throughout the PayPal network. However, withdrawal of funds through Australia's banking system can take several days, depending on the customers' financial institution and its technology. We note this is being addressed by the Reserve Bank of Australia's New Payments Platform initiative. PayPal's inclusion in the RBA's real time payments initiative is a step in the right direction and ensures that any new infrastructure is flexible and scalable to meet future needs.

There should be a roadmap for a smooth transition to the introduction of any significant infrastructure changes in the payment system. This transition would include low costs of migrating from the current system, use of common global standards, and a transparent migration to end users (e.g. platform migration undertaken by the clearing system or by the banks).

As an analogy, ongoing ownership of the "railroad" should not be allowed to select or in any way restrict new entrants from participating in the future.

### **Arbitrary scheme rules**

PayPal supports the view that standards, where appropriate, should be open and technology neutral, to allow participants to demonstrate various security control models and fraud prevention mechanisms.

Scheme rules must provide a framework with the condition for market participants to deliver secure outcomes but not prescribe any particular security procedure. Consequently, there is no need for any additional security requirements for remote payments, as the adequate regulatory framework conditions and market forces already apply.

Payment Service Providers (PSP) themselves have a vested interest in security. Accordingly, their ability to assess security requirement and to design the appropriate methods should not be underestimated or neglected.

PayPal and other PSPs have their own fraud prevention mechanisms, however, PSPs are generally excluded from the advantages of preferential pricing and liability shifts of the card schemes, as the schemes sustain the view that these bespoke solutions are not sufficiently robust.

In fact, diversity in security mechanisms is important in itself as one of the best ways to reduce the risk of a massive and successful attack against the commerce ecosystem. Resilience against the most significant criminal or non-intentional risks should be the primary objective. This goes beyond the promotion of any single security technology.

Security concerns are valid, but mobile payments are not necessarily riskier than traditional payment methods. On the contrary, because of the capabilities and use patterns of mobile devices, mobile payments can play an important role in actually increasing the security of payments and financial data.

It is necessary to carefully differentiate between the various types of mobile payments, remote or proximity payments. The traditional approach to thinking about mobile payments involves the use of NFC technology which includes storing sensitive financial information on a chip with additional security features, the Secure Element (SE). Here all relevant financial information is stored on the mobile device, which raises security concerns around access to the chip.

By contrast, a cloud-based approach using a 'digital wallet' stores only certain user credentials on the device itself. All sensitive financial information is stored remotely in the cloud. Due to the remote storage of sensitive financial information in the cloud a digital wallet overall provides better protection of user credentials.

The funding sources which can be accessed from the mobile device via the cloud are actually located on servers controlled by banks, credit cards, and e-money issuers. These organisations are the owners of the funding sources and related data, and have clearly defined responsibilities as regards the security of the data. There are multiple layers of verification and access mechanisms, which are already and adequately regulated by the existing legislation applicable to payment service providers. The digital wallet using cloud technology therefore provides a more comprehensive context for data storage and usage, and hence a more comprehensive security context.

While such an infrastructure offers vast potential for innovation, for PayPal a "wallet in the cloud" is in a sense simply an extension of the current user experience. When using their wallet in the cloud for PayPal payments, the underlying IT infrastructure for user transactions remains the same, and is protected and regulated the same way, without any added risks or exposure to the IT infrastructure.

PayPal emphasises that the regulatory framework should focus on the result and determine the objective, but not prescribe any particular procedure or method to achieve the objective. It must be left to the payment schemes how to fill the regulatory framework to achieve the regulatory target.

PayPal therefore also argues that any regulatory framework should bind only the payment schemes, but not the individual members of the payment schemes. The members of a payment scheme instead are bound by the scheme's rules which are set to achieve the overall regulatory objective.

It follows that any regulatory framework must cover all payment systems and strictly maintain technological neutrality. It is essential that any regulation is principle-based, sufficiently flexible, and not prescriptive, so as to accommodate the continuous developments in business and technology innovation.

## Security

The principle-based approach will also best be able to capture any ensuing developments of cybercrime.

Authentication is a highly complex issue and has a number of crucial elements:

- Authentication methods must be strong, independently of the underlying payment technology.
- Authentication must be adapted to the specific type and level of risk, and type of user action.
- Finally, authentication is only one element of security. Authentication therefore is a necessary, but not a sufficient condition for payment security.

Increasingly, users are looking for a more personalised and rich experience; they want to access services and goods from any device, anywhere. The development of embedded and mobile platforms, the extension of broadband, the availability of interactive services are all trends which will lead towards a much more complex infrastructure.

So in order to counter the complex security threats, while offering a seamless and rich user experience, the most suitable approach is the development and application of several layers of defence, including a sophisticated, multidimensional and context-aware authentication scheme.

Security and fraud prevention is of vital importance to PayPal in developing check-in and we have achieved this outcome through the following measures:

- PayPal operates a three party model; as such PayPal holds relationships with the merchant and consumer in the PayPal system and completes the necessary identification verification, AML checks and vetting during the sign up process;
- Using geo-location, PayPal facilitates transactions by displaying details of approved merchants to consumers, via the app;
- when the consumer opts to make a purchase from a chosen merchant, PayPal displays the order details along with the consumer's photo within merchant's Point of Sale software, as a form of verification; and
- PayPal's sophisticated risk models work in the background to detect any unusual activity on the account and trigger alerts where appropriate.

## Technology Neutrality

Technology neutral regulation appears to have three main aims: future proofing, online and point of sale equivalence, and encouraging the development and uptake of the regulated technology.<sup>13</sup>

The landscape is rapidly changing and regulators need to have a flexible approach in dealing with all these new business models.

Technology neutrality means that different technologies offering essentially similar services should be regulated in similar manners. However, technologies offering similar services do not necessarily

---

<sup>13</sup> <http://www2.law.ed.ac.uk/ahrc/script-ed/vol4-3/reed.asp>

have similar features in all aspects, and exactly identical regulations may, therefore, result in the advantage of one technology over another in the market. PayPal urges the Inquiry that Australia's financial system maintain regulatory and technological neutrality.

Technology neutrality in regulation must be respected as regards the various types of payment systems and methods.

While some methods may be perceived as more prevalent than others, PayPal points out those payment preferences vary, or even from one transaction type to another.

Regulation should not prescribe or single out any particular standard, product or system.

PayPal insists that any regulatory measures must not disrespect regulatory neutrality, and must foster the conditions for innovation.

It should be the innovators in the market that set the standards to achieve the best outcome and choice for consumers and for market growth overall.

## Conclusion & Recommendations

PayPal is of the view Australia's financial system has served it well, yet can be significantly improved to accommodate the wave of technology evolution which is underway.

Australia's appetite for technology should be leveraged to adopt a financial system regulatory framework which is world leading.

PayPal is advocating a number of recommendations for the Inquiries' consideration to continue to promote a competitive, innovative and stable financial system. These include:

- **Improved definitions of financial products.** The review should consider whether, given the emergence of new technologies and payment methods, the definition of financial products warrants consideration.
- **The adoption of SMART Governance** which combines the use of technology and data with a collaborative and iterative process to measure performance of covered entities, creating a better informed regulatory development process.
- **Revisit closing Australia's cheque system**, noting the changes in technology and more cost efficient alternatives.
- **Expand the Council of Financial Regulators** to include AUSTRAC, and possibly Attorney-General's Department which review and enforce AML/CTF legislation.
- **Consider rapid developments in changing consumer preferences** such as point of sale technologies, biometric technology, virtual currencies, and moves towards a digital wallet. Promoting a regulatory environment recognising this rapid technological change – with further scrutiny on anonymity surrounding payments.
- **The Australian Government lead a regional approach to ePayments regulation** will be beneficial because of the inherently cross border nature of modern ePayments. PayPal has previously called for the establishment of a specific ePayments Subgroup within the APEC Electronic Commerce Steering Group to consider these matters, with the goal of establishing a detailed and consistent framework which individual regulators within each jurisdiction could use to tailor local regulations.
- **Consider establishing a single financial system regulatory standard applying to both Australia and New Zealand.** In effect, if a financial institution has sufficient licenses to operate in one country, that they be considered to do so in the other.
- **Australia's banking and payments industry to build or operate a network which provides a "level playing field"** for new and innovative payments companies.
- **Technology neutrality.** PayPal does not support the view that only one solution should be mandated. Instead, standards, where appropriate, should be open and technology neutral, to leave space for participants to demonstrate various security control models and fraud prevention mechanisms. This holds especially for various payments methods.