M-COMMERCE

WHAT IS IT? WHAT WILL IT MEAN FOR CONSUMERS?

Paper prepared for consideration

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Introduction

There is a significant amount of "hype" about what sort of services and applications will be able to be delivered using mobile phones and other wireless devices. There is also a considerable amount of concern about how these new services will be regulated. Just as with the introduction of electronic commerce, and the use of the Internet, the uptake of mobile commerce, or m-commerce, services are likely to test the regulatory structures that are in place to deal with traditional transactions. While many of the potential problems that arise are likely to be covered by existing consumer protection mechanisms, new issues will undoubtedly emerge in the uptake of m-commerce services where consumers are left vulnerable to unfair marketing and selling practices.

1. Purpose of this paper

This paper provides a broad overview of what mobile commerce, known as m-commerce is,

Mobile phones incorporate ideal characteristics for performing electronic transactions, and have been identified as the future 'electronic wallet'. The SIM card, which is the identification card in the phone, is one of the only examples of the much-touted 'smart card' and can carry information or store value and provide secure authorisation and identification.

Given the central role that payment transactions play in both the economy and everyday life, policy-makers must ensure that there are adequate protection mechanisms for all stakeholders in the transaction process, in particular for consumers.

3. Definition of m-commerce

M-Commerce has been defined as the "use of handheld wireless devices to communicate, interact, and transact via high-speed connection to the Internet."

With the introduction of advanced phone technology, consumers of mobile devices will be able to access content and services anytime, anywhere. For example, they will be able to use wireless devices to access banking accounts and pay bills, receive stock quotes and initiate buy/sell transactions, or receive special promotions and generate orders from any place at any time.

There are a number of different types of electronic commerce that are likely to emerge:

ß Business to Business - Electronic transactions that are conducted as part of trading, for example, the payment for the supply of goods between a producer and a wholesaler.

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The sorts of credit transactions that will be offered could include purchasing a drink from a vending machine, by paying for the drink (and the service) using a mobile phone handset, with the drink being released from the machine once payment has been approved, and the cost is added to the mobile phone bill. Other transactions that are likely to be popular amongst consumers could be more complex, and include ordering and arranging delivery of a pizza, or paying for a parking meter, including loading additional credit when the parking is about to run out, without needing to return to the car.

These services are likely to evolve, and incorporate a number of different features, and different types of technologies. While some, such as purchasing a drink from a vending machine could be an instant transaction, other transactions could include a hybrid of different technologies, and include instant technology mixed with the more traditional text messaging. It is likely that a number of different approaches will emerge as the technology evolves.

6. Technology required to support m-commerce

Wireless data services must be tailored specifically to the wireless device, and different devices will serve different markets. For example, for consumers, the most likely device will be the mobile phone, while for the high-end business user, other devices such as personal digital assistants, similar to mini-computers, with larger screens and more functionality will be necessary to support more complex applications.

Wireless devices are not competitive with wired connections in the speed, quality of presentation, or ease of use, but they are clearly superior in the delivery of immediate and localized information and services.

While 2.5 generation technologies can already support mobile commerce applications, as is evidenced with the run-away success of Japan's DoCoMo service, which offers mobile services using the Internet platform, and has been extremely successful among consumers, uptake of m-commerce has been constrained as a result of its technological limitations, including the limited user interface, the slow transmission of data, lack of global standards and, importantly, the limited applications available.

Technological progress is quickly overcoming these issues, and it is expected that adoption of m-commerce will rise. In Australia, the issue of developing billing systems has been a significant factor in slowing rollout of m-commerce services and applications.

7. Potential m-commerce operators

One group of operators that will be likely to offer m-commerce services are telecommunications operators. They already have a customer base, have the technical expertise, and the experience of handling payments, specifically micro payments. Further, these operators are continuing to examine options that will ensure that the cost of subsidised handsets is recouped.

Mobile operators can move into the financial services arena, including launching a credit card, procuring a banking licence or even buying a bank. We have already seen the development of branded credit cards for non-financial players, like the *Telstra* and *Qantas* cards, but mobile operators could take this even further, by producing both physical and virtual credit cards. The virtual card could be embedded into the mobile phone's SIM card, while the physical version could still be available in the consumer's wallet.

Traditional' providers of financial and retail services have quickly adapted to the new electronic environment, not only in response to the large number of consumers using these services, but also as a reaction to the influx of virtual companies on the Internet, which have offered competitive services in increasingly price-sensitive markets. These operators have adopted the Internet into their more traditional distribution strategies, and provide the customer with reassurance that they are dealing with established brands who still have a shopfront that can be accessed, should a problem arise in the virtual relationship. Banks can become a mobile gateway, allowing the user of any mobile network to access their banking details and make payments.

Another option that is emerging is that a bank can become a mobile phone operator. If a bank chooses to become what has been termed as a Mobile Virtual Network Operator (MVNO), it can not only provide banking, but also provide phone services.

There are other potential operators also emerging. The mobile operator, offering competitive global services, without the cost of a physical space, is emerging. However, the issue of how these operators will engender trust from their customers is an issue that is currently being grappled with. The model that is occurring at the moment, is that new operators are establishing partnerships with existing providers.

The emergence of new players in the payments market, such as telecommunications operators and new networks may lead to payment provision via alternative markets, and introduce more competition.

8. Broad regulatory framework for m-commerce

In identifying the broad range of transactions that are likely to emerge for m-commerce and the potential operators that could become m-commerce providers, or be involved in different parts of the m-commerce value chain, it is likely that these applications and services will be subject to a broad regulatory regime that includes regulations covering telecommunications, broadcasting, advertising and the provision of finance and credit. In addition to industry specific regulation, competition policy will have significant impact on the overall regulation of m-commerce services, in particular relationships between providers, including mergers and other anti-competitive relationships that could emerge between different elements in the value chain.

advertising using mobile technology. In 2001, the Wireless Advertising Association (WAA) established recommended privacy guidelines for its members based on the premise that wireless push advertising should only be sent to customers who have asked for it. The WAA also declared that wireless unsolicited advertising (spam) would serve neither the needs of consumers or the wireless industry, and that "Confirmed Opt-in" should become the de facto standard for wireless push advertising.

Some legislatures have also adopted additional protection mechanisms that will support m-commerce. California has recently started to regulate the use of mobile phones as payment devices. Any non-telecommunications charges placed on a telecommunications bill, including wireless bills, is regulated under a new Public Utilities Code rule, which applies to billing telephone companies, billing agents and vendors using billing services. The intent of the law is to protect consumers and businesses against abusive billing practices.

From July 1 2001 the Californian Public Utilities Commission has regulated the use of mobile phones as payment devices when the charge is billed to the consumer by the wireless telephone service provider.³ Under these regulations, telephone companies must provide consumers with the option to dispute a charge that they do not believe was authorised, and companies are prohibited from releasing confidential subscriber information. Billing companies are responsible for investigating specific complaints about charges.

In Australia, there is already both a federal and state suite or legislative instruments and bodies that are likely to have a role in overseeing and managing the introduction of mobile commerce. An overview of the different regulatory regimes that have been established for the telecommunications industry, the banking and credit industry and the content and information industry are outlined in an Attachment to this paper (see Attachment 1). This summary may not capture all the different structures that could be relevant, but do provide an illustration of the complexities that are likely to emerge in regulating m-commerce.

An important component of this regime will be the various self-regulatory mechanisms that have been put into place by individual industry organisations. Already, some mechanisms are being put into place to deal with emerging issues that are arising as a result of developments in the market, such as the use of mobile phones for advertising and marketing purposes. The Australian Communications Industry Forum, representing telecommunications carriers, is working on developing a code of conduct that will place obligations on those advertisers and marketers who wish to send out messages through mobile phone carriers to their subscribers. More detail of this approach is provided in the Appendix, and it provides a useful example of how industry is responding to provide some safeguards to consumers as the potential of m-commerce is realised.

There extent to which this framework is sufficient to protect the interests of consumers as they use m-commerce applications and services is as yet unknown, and will require further analysis. This will be essential to ensure that consumers remain protected, and to ensure that the full potential of m-commerce can be realised.

³ Caldwell, K. 2001, Federal Government and States to Regulate Mobile Payments, *The Public Policy Report, CommerceNet Newsletter*, Vol 3, No. 7, July 2001. www.commerce.net Accessed 16 April 2002

9. Case studies of m-commerce applications

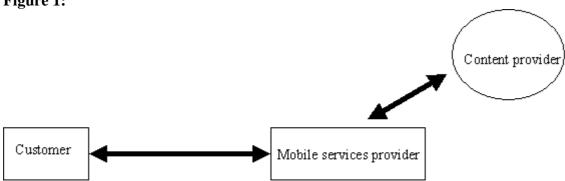
9.1 Banking

A number of banks are already offering mobile banking services using the WAP mobile phone technology. Many banks currently deliver static account information to wireless devices, and an increasing number allow customers to transact over the mobile Internet. Almost half of Western Europe's WAP-enabled mobile banking accounts originate in

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These relationships will need to be explored in some detail to determine what sorts of problems could arise in m-commerce, and what sort of protections for different elements in the value chain need to be established. In the meantime, the following set of figures will illustrate the different sorts of relationships that could emerge, involving a range of different relationships between different parties.

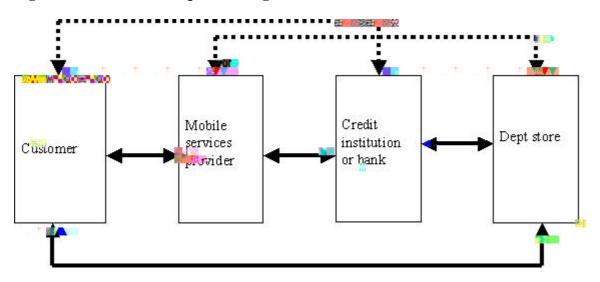
Figure 1:



In this scenario, a relationship exists between the customer and the mobile services provider,

In this figure, the customer has a relationship with the mobile services provider, who charges a fee for the customer using it to purchase a coke, and adding the cost of the coke to the mobile phone bill. The mobile service provider will charge the customer a surcharge for using the service. The customer also has a relationship with the coke provider and/or the vending machine operator for the condition of the product.

Figure 3: Relationships involving financial institutions



similarly end the parking time. The cost of the parking appears on the customers mobile phone account.

The standard billing model has meant that consumers with mobile phones receive their bills on a monthly basis for payment using a variety of mechanisms. In this sense, this model is similar to offering a consumer a line of credit. However, telecommunications operators also offer prepaid services, which would enable their customers to pre-pay the mobile account, which could be drawn on to pay for the parking and other services. Pre-paid cards also limit the risk for operators.

11.2 Linking payment to bank account

An alternative payment model could be the telecommunications operator retaining control over the organisation of payments, but with the bank being responsible for the billing and managing the finances as well as the transfer of funds from the bank account to the mobile account.

Using a second example of managing a parking payment, a consumer who wants to pay for parking using m-commerce would call a certain number to establish an account that would be managed by the telecommunications operator. In order to start using the account, the user would have to make an agreement with an Internet bank. The consumer would be able to load up the mobile account with funds that would be drawn on to pay for parking as well as any other services that had an agreement with the Internet bank managing the account of that consumer. In this case, the m-commerce arrangement performs more like a debit - or pre-paid account, rather than a credit account.

12. Issues associated with the introduction and uptake of m-commerce

The basic premise is that mobile consumers will want everything to work just as well as it does in the real world. They will want to be able to make m-commerce payments in the same way that they make e-commerce or physical world payments - easily, quickly, safely and with confidence.

This means that m-commerce transactions must share the same characteristics as all other payment card transactions - cardholder and merchant authentication, data integrity, privacy, confidentiality and non-repudiation.

It is essential that these issues be identified to determine the consumer protections that are currently in place, and those that need to be established to ensure that consumers are adequately protected before widespread uptake.

12.1 Privacy

Privacy issues have always been a key reason for potential online consumers to avoid eCommerce. In the early days of eCommerce, a significant fraction of consumers thought that credit cards could be "snatched" off the Internet. Solid encryption technologies has reduced most of those fears, and for the most part, new consumers don't worry about losing credit cards while online. However, there remain some very real privacy issues associated with conducting transactions electronically, which may be exacerbated with the capacity to undertake mobile transactions. These include unauthorized access to stored data, especially personal information and transaction history.

12.2 Security

Securing m-commerce may be even more difficult than protecting wired transaction. Constrained bandwidth and computing power, memory limitations, battery life and various network configurations all come into play, raise the questions as to whether there will be adequate security for users without compromising the ease of use and speed.

In the use of text messaging, a number of security issues have already been identified, and will extend to the use of m-commerce. While a direct SMS message is relatively safe because it is encrypted for its transition from one mobile handset to the other, because of its store forward nature, messages are vulnerable to being corrupted. Like voice messages, SMS' are stored on a server before being forwarded to the receiver. There is no mandatory encryption and access protection for storage. The only way to secure the entire transmission would be with end-to-end encryption.

Messages exchanged between two service providers can also be violated in transit if the link between the two networks is not protected. If this information is payment details or © Consumer Affairs Victoria, Department of Justice. June 2002

consideration. It is anticipated that m-commerce, like the Internet, will be largely a 'pull' rather than 'push' medium, which questions who would be held liable for the transmission of illegal content.

There will be other issues that need to be considered, including the risk associated with legal liabilities such as defamation, obscenity, copyright, trade mark and patent infringement, data protection compliance etc.

12.9 Intellectual property issues

Broadband mobile delivery will enable data-intensive audio-visual information to be transmitted, and thus, there are likely to be considerable concerns with intellectual property issues, and transmission of content that is subject to copyright.

12.10 Standards and competition

In the longer term, competition problems may arise as a result of network effects. There is limited scope in the market for payment services for a large number of incompatible m-commerce payment processes. Users have a high preference for ubiquity. Firstly, a user wants the ability to send and receive money from other users. Secondly, a user wants to be able to use a payment function wherever he is. The usefulness of a payment system increases with the number of users, and a payment network is more valuable to each of its users the greater number of total users. This positive network externality favours the emergence of a standard and technical interoperability.

At the moment, as new systems are struggling to obtain precedence in the market, there is

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that the system will be regulated as a result of credit providers avoiding customers who pose a high risk, however this is questionable, particularly in the introduction of new services that are struggling to obtain market dominance, and could sign up customers that pose considerable credit risk.

12.12 Taxation

M-commerce is likely to present additional taxation problems. Some sites use Internet Protocol addresses to try to see whether a customer is in a particular tax jurisdiction, some try bank addresses, while others require social security numbers. Without an effective user ID program on mobile phones, it may be complex for government to determine payments that are being made via m-commerce.

12.13 Evidence and Enforcement

Perhaps one of the most important issues that regulators, including State and Territory and Federal regulators, will need to grapple with is how any existing and future consumer protection regulations, along with the other components in the broad regulatory framework will be able to be enforced with regard to m-commerce, and m-commerce providers.

A key question is evidence. How will consumers be able to prove that advertisers, marketers or companies have not adhered to the provisions in the various regulations or codes. Given the small size of mobile phones, the limited display options, and even the memory capability, it may be difficult for consumers to retain messages or content that has been sent to them on their phones for a period long enough to have the complaint recognised and dealt with. Furthermore, if the evidence is actually contained on the phone, in the form of misleading or intrusive content, how many consumers are likely to wish to give up their phones (and the number) for the purposes of providing evidence to any investigation.

12.14 Education and Awareness

Enforcement is also likely to be difficult given that mobile phones, and the messages that are sent or downloaded are usually only available to the individual who can see the screen and access the handset. An awareness and education campaign will be required to ensure that consumers are aware of their rights and obligations in the use of m-commerce.

13. Possible elements of a consumer protection framework for m-commerce

Despite the likening of m-commerce to other forms of electronic commerce, and the capacity to transact over the Internet, it is likely that there will be a dramatic difference between wireless and desktop Internet transactions.

We cannot assume that the rules will be the same for m-commerce as they are for e-commerce.

In order to ensure that consumers are protected in the use of m-commerce applications and services, there are a number of basic requirements that need to be fulfilled, including:

- ß Ability to authenticate the parties each party must be able to authenticate the identity of the other party.
- ß Ability to authenticate the transaction the consumer must be able to have confidence in the delivery of the genuine goods ordered and the merchant must be able to establish the genuineness of an order.

- ß Security of transaction the transaction should take place in a secure environment; transfer of confidential information and goods delivery channels should be secure from external interference.
- ß Electronic evidence of transaction a transaction log, including the offer of sale, order for goods, confirmation and payment authorisation etc, must be created and deposited in an unalterable format at a trusted repository from where it can be retrieved, in event of a dispute.
- ß Electronic contract terms and conditions each party must be able to establish an electronic contract easily and unambiguously with the details of the transaction, the terms and conditions of sale, and a contract sale.
- B Payment protection the payment must be guaranteed as well as protected.
- Ability to suspend, cancel or block transaction consumers must have the right to suspend or cancel ongoing transactions like subscriptions to stock quotes. Similarly, they must also have the capacity to block unsolicited content from being delivered. Merchants must retain the right to suspend transactions if there is a breach.
- ß Ability to limit or reduce liability consumers must have the capacity to reduce or limit the credit available, and similarly, merchants need the option to place consumers who are considered risks on limited credit.

14. Building a consumer protection framework

Already, a number of elements can be identified that will all come into play in supporting the development and uptake of m-commerce. These include:

- ß Education and information- consumers need to understand the risk to their personal well being in an unsecured transaction mechanism, and need to be motivated to care about and protect their personal information and transactions.
- ß Regulation there is an important role for reasonable and appropriate government partnership and initiative through prudent legislative and regulatory guidelines
- ß Industry incentives incentives need to exist to ensure that industry takes responsibility for protecting consumers, as a means of competitive advantage. Similarly, advertisers and marketers need to be motivated to not compromise consumers' personal information and not to gather and misuse information.

Ironically, many of the issues that are already emerging are already concerns in current use of mobile phones and the current provision of credit and general sales. For example, in the mobile phone industry, there are already a number of consumer issues such as the use of the lengthy contracts and difficulty in terminating a contract; problems of repairs; and liability if a phone is stolen. On the credit side, the problems of being charged for transactions that were not authorised; what happens when goods are delivered as faulty; and issues of liability are all current issues that need to be addressed in the context of m-commerce. Issues associated with excessive consumer debt cannot be ignored.

There is already a range of regulations in place that could have application to m-commerce, including the relevant national and state or territory specific legislation that m-commerce is likely to be regulated under. There are also likely to be a number of limitations in current legislation to protect consumers using m-commerce. For example, current fair trading legislation in Victoria requires adequate disclosure about terms and conditions of purchase. How will these be transmitted via a mobile phone given the limitations of the screen? Another example is in the provision of financial services advice online. Prior to doing this, a firm must obtain a considerable amount of information about a prospective customer. It is not

clear that these regulatory requirements can be met using a mobile phone as the small phone screens can show a maximum of 100 characters. It seems impractical and cumbersome to expect a customer to tap out the words on a mobile phone handset.

Nevertheless, there are options to improve consumer protection and consumer trust, including possible amendments to existing consumer protection frameworks, and industry-based approaches. For example, establishing trust marks might be one practical way to improve protection. A trust mark is a recognisable logo that can be granted to a business that is compliant with a code of conduct. However, as a recent study in the European Union has found, since trust marks have a recognisable brand value, there is now a proliferation of trustmarks on the web, leading to confusion and even raising certain doubts in the consumer's mind regarding their trust value. There is also significant disparity between various trust marks in terms of their scope and depth, which points toward the need for harmonisation and standards to promote confidence by consumers.⁵

15. Conclusion and invitation to comment

The purpose of this paper is to provide a very broad overview of what m-commerce is, and the sorts of issues that are likely to emerge that regulators must consider to ensure that consumers will be protected in using m-commerce services and applications.

At this stage, we are seeking comments from jurisdictions, including identification of consumer issues arising, any policy analysis currently underway, and whether or not there is support for coordinated work in this area.

For further information and to provide feedback, please contact Policy Officer, Tanya Sewards, Consumer Affairs Victoria (CAV) on telephone (03) 9627 7179 or at tanya.sewards@justice.vic.gov.au

Cawdhry, P. & Wilikens, M. 2001, Consumer Protection and Redress in e-Payments: Issues, Policies and Technologies. IPSC Joint Research Centre, http://www.jrc.es/pages/iptsreport/vol63/english/ICT5E636.htm Accessed 22 April, 202.

REGULATORY FRAMEWORK FOR M-COMMERCE

The purpose of this section of the paper is to identify, and briefly discuss, the regulatory framework that will apply to m-commerce. This includes the different regulatory and self-regulatory bodies that will come into play in different m-commerce transactions.

The application of National Competition Policy on the development of m-commerce will be dealt with in the next stage of developing this paper.

1. Federal Regulatory Framework

1.1 Telecommunications Industry

The telecommunications industry is largely regulated by the Federal Government, with the

Australian financial regulation. The Report of the Financial System Inquiry, known as the "Wallis Report", recommended changes to the regulatory structure.

The Wallis Report recommended that regulation be function-based, and that new regulatory bodies be given responsibility. The principle reason for this was the perception that the Reserve Bank of Australia (``RBA") was too closely associated with the banks. To counter this perception, the Australian Prudential Regulatory Authority (``APRA") was created and given the responsibility, previously exercised by the RBA, of prudential supervision.

Banking Act

The *Banking Act* covers the different types of organisations that are allowed to conduct banking activities and the way they conduct these activities. Under the *Act* an entity cannot call itself a bank without the consent of the Australian Prudential Regulation Authority (APRA). The following types of authorities are allowed to conduct banking business: a bank; a building society; a credit union and an authorised deposit-taking institution. As a result of the Wallis inquiry in 1997, a new class of financial institution was introduced into the legislation, the "authorised deposit-taking institution" (ADI).

The *Banking Act* is likely to apply to m-commerce transactions if these transactions can be defined as 'banking business'. An electronic payment system will amount to the conducting of banking business if it involves the "taking of money on deposit" and the "making advances of money" within the meaning of the *Banking Act's* definition of banking business.

The relevance of the ADI regulatory regime for electronic payment scheme participants is as follows. If the participant's activities in the scheme (or its activities generally) amount to "banking business", then they must apply for an authorisation or exemption from APRA. To fail to do so would expose the participant to civil penalties.

There is a growing body of statutory regulation, including the *Corporations Law*, the *Trade Practices Act* 1974 (Cth) and the *Contracts Review Act* 1980 (NSW), that extends to ADIs and affects their operations and administration.

1.3 Content and Information Provision

There are a range of regulations that have been devised to handle different types of content, including: content developed for broadcasting purposes, advertising and marketing content, and personal information.

The broad federal legislation that covers issues of content is the Broadcasting Services Act, which has application to material that is broadcast on the television or the radio, as well as information available on the Internet. It outlines a number of standards for content and information provision. The Federal government also regulates the handling of personal information, another form of content, through the privacy regulations.

Broadcasting Services Act

The legislative basis for the regulatory regime for Internet or other online content is the *Broadcasting Services Act 1992*.

In 1999, the *Broadcasting Services Act* was amended to incorporate provisions that could extend content regulation to encompass online content, including content on the Internet. The

There are also exemptions for the media, and political parties and for information held in employee records. Some organisations have signed up to meet the standards of Privacy Codes rather than the NPPs. The Privacy Codes must provide protection at least equivalent to the NPPs.

The *Privacy Act* will have application on the ways in which personal information of consumers who use m-commerce services can be collected, as well as the ways in which their personal details can be used, in particular by advertisers and service providers. Telecommunications operators already handle large amounts of personal information about subscribers to mobile phone services, and with the introduction of m-commerce services, the amount of information collected on mobile subscribers by other parties, including banks and credit providers as well as traders, is likely to increase. All of these organisations will be bound to handle the personal information of individuals according to the principles in the *Privacy Act*.

Interactive Gambling Act

The *Interactive Gambling Act* 2001 (IGA) is intended to limit access by Australians to some types of gambling sites on the Internet. The Act imposes obligations on ISPs, Interactive Gambling Service Providers, Publishers, Datacasters and Broadcasters for enabling providing access to prohibited gambling content. Companies who fail to comply with some obligations may be guilty of an offence against the Act.

Electronic Transactions Act 1999

The Commonwealth's *Electronic Transactions Act* commenced on 15 March 2000 and allows Australians to use the Internet to provide a range of Commonwealth departments and agencies with electronic documents which are as legally sound as traditional paperwork. It also allows people to communicate electronically with Government on a diverse range of issues, such as family law matters, research and developments grants and applications under Freedom of Information laws. The Act provides a light-handed legal framework to support and encourage business and consumer confidence in the use of electronic commerce.

This Act could be relevant where mobile phones are used as a communications means with Government. In June 2002 there was a suggestion that the Department of Workplace Relations, which managed Australia's unemployment contributions would use text messaging to contact people who had not submitted the correct forms to have their entitlements processed. This could evolve into a form of m-commerce, and, while it is untested at this stage, the *Act* could be broadened to encompass these forms of communication.

1.4 The regulators

The following regulators are involved in overseeing, and controlling the provision and access to telecommunications services in Australia.

Australian Communications Authority

The Australian Communications Authority (ACA), a Commonwealth Government regulator, is responsible for administering a range of technical and consumer issues relating to telecommunications, as well as managing the radiofrequency spectrum. The ACA licenses telecommunications carriers and reports to the Minister for Communications, Information Technology and the Arts on the performance of carriers and service providers. it is responsible for the allocation of licenses and spectrum, with technical standards and industry practices. The ACA has functions under the

- setting standards about what they tell their customers
- monitoring their sales practices and compliance with codes of practice
- checking customer complaints systems and
- investigating and taking action against misconduct.

The Australian Prudential Regulation Authority (APRA) is responsible for the promoting the safety and soundness of deposit taking institutions and the Reserve Bank of Australia, is responsible for monetary policy and the stability of the financial system.

Consumers are also protected under State law administered by State Fair Trading Offices and against misleading and deceptive conduct by Commonwealth trade practices laws administered by the Australian Competition and Consumer Commission.

Australian Broadcasting Authority

The Australian Broadcasting Authority (ABA) was established by the Broadcasting Services Act 1992 (BSA). Among its other functions of planning for the provision of television and radio services, and monitoring compliance with the ownership and control provisions of the BSA, the ABA is charged with the regulation of material that is transmitted over broadcasting medium, including radio, television, Pay TV and the Internet. The ABA assists the different sectors of the television, radio and Internet industries to develop codes of practice relating to content and complaints handling and investigates complaints about inappropriate content on broadcasting services and the Internet. It also develops and administers program standards about Australian content and children's programs on commercial television and conducts research into community attitudes on programming matters.

The ABA is also charged with implementation of the recently passed *Interactive Gambling Act* 2001.

Federal Privacy Commissioner

The Federal Privacy Commissioner has responsibilities under the federal Privacy Act 1988 and is able to assist consumers who have complaints regarding privacy issues relating to Commonwealth or ACT government agencies, consumer credit reporting activities, tax file numbers and spent convictions. On 21 December 2001, the Commissioner will be empowered to investigate privacy complaints against private sector organisations as a result of the commencement of the Privacy Amendment (Private Sector) Act 2000.

State Regulatory Framework

adogiTiEcted un. Iting matters medium TiEershith ur tacy islay thand conducts. The different elements of State regulation that could come into play in the regulation of m-commerce services and applications are outlined below. The extent to which each of these will apply to advertising, content provision and messages that are delivered via mobile phones, and other elements of m-commerce are yet to be explored, however, they are likely to

Fair Trading Act

In Victoria, the *Fair Trading Act* covers the conduct of industry and traders in the marketplace. This Act is very broad in its application, but includes provisions that include regulating traders in terms of:

- selling practices allowing for cooling off periods in the case of contact sales (e.g. door to door selling);
- conduct of traders, including unfair and unconscionable conduct (when the power differences between the parties result in significant detriment to one party);
- product claims the features that they attribute to a certain product, and other forms of misleading and deceptive conduct;
- disclosure of trading details advertisers must include details of their businesses and address to enable those who wish to complain to direct their complaint to the appropriate person; and
- contractual practices certain information must be provided on contracts between traders and consumers.

These provisions are likely to have an impact in the provision of m-commerce services, as well as the purchasing of goods and services using m-commerce applications.

2.2 Banking and Credit Industry

In addition to the provisions in the Fair Trading Act, the credit industry is also subject to specific legislation in Victoria that regulates the provision of credit.

Consumer Credit (Victoria) Act 1995

The Consumer Credit (Victoria) Act 1995 regulates the provision of credit in Victoria applies the Code in Victoria, which is known as the Consumer Credit (Victoria) Code. It was developed to give credit providers and consumers the same rights and obligations throughout Australia.

The Code was developed as a result of the State and Territory Governments *Australian Uniform Credit Laws Agreement*. Under the agreement, the Consumer Credit Code was first enacted in Queensland, known as the template legislation. The other States and Territories then passed their own legislation to adopt the Code. Any changes to the template legislation automatically apply in Victoria.

The Consumer Credit Code is intended to apply 'truth in lending' principles to all consumer credit transactions, including housing loans. Hire purchase agreements and some leasing arrangements are also covered.

2.3 Content and Information Provision

State Governments have not traditionally attempted to regulate content, however, some jurisdictions have established their own regimes to manage the collection, storage and use of personal information.

Information Privacy Act

A privacy regime was established in Victoria to cover the use of personal information by the State government. The *Information Privacy Act* 2001 establishes a regime for the responsible handling of personal information in the Victorian public sector and is due to come into effect in September 2002. It identifies 10 principles that are compatible with the National Principles, to cover how information is collected and used by State government departments.

However, there has been little work on other forms of content regulation. Advertising and marketing practices have largely been left to industry efforts, and there are a number of industry codes that deal with content in advertising, as well as marketing and advertising practices.

2.4 The regulators

Office of Fair Trading

of the Australian communications industry. Its primary functions include development of industry codes of practice for registration and the timely production of technical standards, specifications, plans and guidelines that the industry and community need.

Codes that have been developed by ACIF and registered that could have relevance in the provision of m-commerce services by telecommunications operators include:

- The Credit Management Industry Code: deals with suppliers' credit management and credit assessment of customers in relation to telecommunications activities, as defined in section 109 of the Telecommunications Act 1997, and is applicable to carriers, carriage service providers and content service providers.
- The Billing Industry Code: specifies the rules for the management of customer billing including bill content, billing verification and billing timeliness and the minimum standard requirements of a supplier's practices for billing.
- Call Charging and Billing Accuracy Code: specifies the requirements for checking the accuracy of call charging and billing of the standard telephone service in a multi-service deliverer, multi-network environment in Australia. It will assure end customers, regulators and government that carriers and carriage service providers provide an acceptable level of overall accuracy in the calculation of call charges. The code is intended to give customers confidence that call charging and billing is correct, and to ensure that carriers and carriage service providers are sensitive to consumer billing complaints.

Telecommunications Industry Ombudsman

The Telecommunications Industry Ombudsman (TIO) was established in 1993. The TIO scheme is a company limited by guarantee, operating at arms-length from industry and Government. Funding is derived from fees charged to members, based on complaints against members. The Act requires certain carriers and carriage service providers to enter and comply with the scheme.

The TIO provides a free, independent investigation service for residential and small business customers of telecommunications and services, including mobile and Internet services, who have been unable to resolve certain complaints directly with their telecommunications carrier, service provider or Internet service provider.

Service Provider Access Network (SPAN)

SPAN is the national industry association formed in 1993 to represent the service provider industry and organisations in related fields directly involved in the provision of telecommunications services to business and residential customers

Since its inception, SPAN has actively advanced service provider interests through participation in and contribution to the formulation of regulatory and legislative policy, industry codes and standards and carrier/service provider inter-working processes and practices. All SPAN members agree to be adhere to a Code of Ethics that outlines good business practices, ethics and professional behaviour.

3.2 Banking and Credit Industry

Banking Industry Ombudsman

The Banking Ombudsman Scheme was set up in 1990 to help individual bank customers sort our their unresolved complaints with their banks.

If the consumer has a dispute with a bank, he or she may take the complaint to the Banking Industry Ombudsman, the most elaborate of the dispute resolution mechanisms. The Australian Association of Permanent Building Societies has developed a model based on mediation and expert determination. There are four separate Credit Union Schemes

Code of Banking Practice.

The Australian Bankers Association has developed the Code of Banking Practice to provide guidelines on how banks should deal with their customers. It requires the banks to provide personal customers with a free, external and independent process for resolving disputes. It is paid for by the banks as part of their service to you. More recently the Scheme was extended to allow small business to complaint. However for small businesses which want more than an initial consideration of the merits of their case, a fee will be payable. This fee may be refunded depending on the outcome of the case.

Australasian Institute of Banking and Finance Code of Conduct

The Australasian Institute of Banking and Finance (AIBF) is a professional institute for individuals engaged in the banking and finance industry in Australia. The AIBF has its own Code of Conduct and its members are expected to be committed to a high standard of ethical conduct as outlined in the Code.

Electronic Funds Transfer Code of Practice

The Electronic Funds Transfer Code of Conduct is a voluntary code that applies to all transactions which are initiated by an individual through an electronic terminal by the combined use of an electronic funds transfer plastic card and a personal identification number (the PIN), or which are intended to be so initiated. It sets out rules about how electronic funds transfers should work and regulates various aspects of electronic payments, including the all-important problem of allocating losses in the event of a dispute. The Code sets out what the business must do, the rights and responsibilities of consumers and the avenues available, should a dispute arise.

The EFT Code does not cover business accounts or biller accounts. Biller accounts are accounts maintained solely to record amounts owed or paid for non-financial goods or services supplied by the company (eg an electricity account).

3.3 Content and Information Provision

Internet Industry Association

The Internet Industry Association has developed three industry codes of practice to regulate the provision of content over online networks, that could potentially be applicable to m-commerce content. These have been developed as part of the co-regulatory scheme that has been established by the ABA. The scheme aims to encourage use of the Internet and settle community concerns.

The scheme has three components:

- the establishment of a complaints online hotline that provides a means for addressing community concerns about Internet content.
- the development of industry codes of practice by the Internet industry.
- the education of the community, monitoring content and other non-legislative activities.

The Australian Broadcasting Authority (ABA) registered three industry codes of practice on 16 December 1999 that outline the obligations of Internet Service Providers (ISPs) and Internet Content Hosts (ICHs) in relation to the range of Internet content matters set out in

ISPs must also provide them with adequate information to install and start using this software, or initiate the process as part of the registration of the customer.

The Code also places some obligations on the ABA, to notify companies developing the filtering technologies of the information that will identify gambling content which is prohibited, to ensure that the software is continually updated to identify, and filter this content.

Australian Communication Industry Forum Privacy Code

The ACIF Protection of personal information of customers of telecommunication providers expands the privacy protection afforded by the Telecommunications Act by setting rules for the handling of customer personal information. The Code is drawn from the National Privacy Principles to provide rules and guidance to telecommunications providers in the handling of their customers information.

The IIA is also currently developing its own Privacy Code that will be applicable to its members (including small business which is not subject to the national privacy regime) to provide guidance on the way that its members handle and use personal information of subscribers.

Short Message Service (SMS) Interoperator Issues - DRAFT Industry Code

The Australian Communications Industry Forum (ACIF) is current working towards developing a Code of Practice to handle the delivery of marketing messages to mobile telephone customers. It has been developed in response to the increasing amount of marketing and promotional messages, particularly unsolicited messages, that are likely to be sent via SMS text messaging technologies to an individual's mobile handset.

The Code covers the sending of marketing messages by carriers: the relationships between carriers and the commercial marketing bodies; and where exemptions can be available. Any commercial operator that is using a carrier to send marketing messages to its customers (subscribers to the mobile phone network) will be required to comply with the Code.

Once it has been finalised, it is intended that this Code will be registered with the Australian Communications Authority, under the *Telecommunications Act 1997*.

Advertising Codes of Ethics

Since 1998 advertising in Australia has been governed by a voluntary system of self regulation administered by the Advertising Standards Bureau. This system of self regulation is designed to complement other systems of regulation in the advertising environment, including the television and radio specific advertising codes of practice that have been established under the auspices of the Australian Broadcasting Authority (ABA) and the regulation through the various State and Commonwealth fair trading and consumer affairs agencies, who oversee issues of truth and accuracy in advertising.

Both peak bodies that represent advertisers in Australia, the Advertising Federation of Australia (AFA) and the Australian Association of National Advertisers (AANA) have developed their own Code of Ethics, however, the latter only applies to material that is published or broadcast, but not to material that is directly distributed to individuals (direct marketing) or Internet content.

While these self-regulatory systems are likely to have some bearing on advertising that is transmitted via mobile phones, given that these advertisements are being transmitted over the public spectrum, managed by both the ABA and the Australian Communications Authority. However, given that these Codes are focused on agencies that produce advertisements and do not cover direct sellers, the impact of these codes on the sort of advertising that is likely to be limited.

3.3.4 Australian Direct Marketing Association Code of Practice

In 1997 the Direct Marketing Model Code was released to provide guidance on what has been deemed to be 'appropriate' marketing practices, and prevent unreasonably intrusive practices by those industry groups who are involved in direct marketing.

The Model Code has been developed to encourage Industry associations who are involved in direct marketing, to establish their own codes of practice based on the provisions contained in the Model Code. Individual companies are also encouraged to adopt the standards set out in the Code.

In response to the development of the Code, the Australian Direct Marketing Association (ADMA) developed its own Code of Conduct, based on the provisions in the Model Code. Broadly, the ADMA Code identifies standards of fair conduct in relation to telemarketing, data protection and e-commerce standards including providing clear and unambiguous information about the identity of the businesses and the goods or services they offer, verifiable contracts, effective consumer complaint handling and security/authentication measures. A key feature of ADMA's Code of Practice is the establishment of an independent complaints body. The body investigates unresolved consumer complaints about members as well as non-member companies. Members will also be required to have their own internal customer complaints-handling procedures in place.

These self regulatory codes of practice and ethical principles are likely to come into play in the use of mobile technologies to advertise and send marketing messages, however, the only limitation is that these self regulatory frameworks are only applicable to the members of the relevant organisation.