



# PAYMENTS MONITOR

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*PAYMENTS MONITOR is published by APCA each quarter. Its purpose is to keep members and interested parties abreast of developments in payments clearing.*

APCA IS CO-ORDINATING  
Y2K TESTING ACROSS  
PAYMENTS CLEARING  
SYSTEMS

## YEAR 2000 PROJECT

APCA is managing a program of Year 2000 inter-organisational testing across the payments clearing system, including APCA's clearing systems and streams and BPAY.

APCA's coordinating role sits within a wider co-operative framework established between financial institutions and led by a Year 2000 Interbank Working Group (the IWG).

The testing program is a major undertaking and will play a vital part in maintaining government, industry and community confidence in the stability and integrity of the payments clearing system, including the exchange of cheque and electronic payment transactions between financial institutions.

A Testing Sub-group of the IWG has developed a Year 2000 readiness strategy and methodology for the various payment systems. The Year 2000 testing program will involve the members of the clearing systems exchanging payments with each other in a simulated Year 2000 environment.

APCA has recruited an IWG Year 2000 Program Manager, Mr Mike Forey, and a project team.

A testing scope is being developed for each of the payment systems. Once testing scopes have been agreed, common test cases for each system will be developed for use by the organisations participating in the testing.

The IWG Year 2000 Program Manager will develop an overall plan for the testing, with testing dates set for each testing organisation. The APCA Board will receive regular reports on progress against the plan. Each organisation will be required to have its systems Year 2000 compliant before commencing testing with any other organisation.

Business continuity plans will also be prepared for each clearing system, in the event of problem situations arising during the change from 1999 to 2000.

## APCA MEMBERSHIP SEMINAR

Since APCA was established in 1992, substantial changes have occurred in the payments environment. Institutional demarcation in the provision of particular payment services has become blurred, and there have been changes to the way that payment services are provided as a result of the influence of new technologies and communications channels.

In response to these changes, and to alterations in the financial system landscape recommended by the Wallis Inquiry, APCA is reviewing the range of representation in payments clearing decision-making.

Decision-making within the APCA forum has, under its charter, been restricted to those organisations participating in payments clearing and settlement activity - banks, building societies and credit unions. There are organisations outside APCA's current membership which now play a significant role in the payments system. APCA is reviewing how involvement in decision-making may be broadened, enabling a wider set of interests to be represented.

To explore the issues, a seminar is to be held on 13 August with organisations which, as a significant part of their business activities, issue payment instruments to their customers or are otherwise engaged in providing payment services.

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TO FACILITATE ELECTRONIC COMMERCE, APCA IS DEVELOPING A FRAMEWORK WITHIN WHICH ORGANISATIONS PROVIDING PAYMENT SERVICES CAN ISSUE CERTIFICATES TO THEIR CUSTOMERS.

## PUBLIC KEY INFRASTRUCTURE

A public key infrastructure (PKI) is required to support digital signatures. Such an infrastructure will promote safe and secure payments over the Internet, and support electronic commerce generally over open systems.

PKI involves *certificates* being issued by trusted *certification authorities*. Through a PKI, third parties can authenticate the holder of a certificate, and can be assured of the integrity and confidentiality of electronic messages "signed" by the certificate holder.

APCA has commenced work to establish itself as a certification authority for the payments industry. Providers of payment services, certified by APCA and operating under APCA rules will, in turn, be in position to issue APCA-accredited certificates to their customers.

The project to establish APCA as a certification authority is scheduled for completion in the middle of 1999. The first phase of the project, to document requirements, is scheduled to be completed in October 1998.

## SUMMARY OF TERMS

Discussion about public and private keys and the use of certificates can be complex and confusing. The following summary of terms aims to provide a level of understanding.

### Use of Certificates

With the growth of the internet and electronic commerce in general, various electronic applications are developing in the payments industry. These include:

- ▲ electronic bill payment;
- ▲ electronic banking;
- ▲ electronic shopping; and
- ▲ electronic business.

A number of technologies are emerging to support these applications, and these involve the use of certificates.

### Certification

Certification is the process of validating a user's unique name and public key. It involves a trusted third party or Certification Authority (known as CA) signing a copy of the user's public key. The resulting electronic document is known as a certificate. Other information such as the validity period of the certificate or details which identify the holder of the associated private key may also be contained on the certificate.

Where the user of a certificate trusts the signing CA, that user can then have confidence in the validity of the public key and the identity of the certificate-holder.

While methods other than certification can be used to generate such confidence among small groups (for example where they are able to validate each others' public keys by special arrangements), certificates are the only practical approach for generating confidence in the validity of the public key and the identity of the certificate-holder in large or open systems.

### Keys v's Certificates

A common confusion is between keys and certificates. A key can be private (secret to the keyholder) or public. A certificate is a public key which, together with other information, has been signed by a CA vouching for its validity. Certificates do not have to be kept secret, can be published widely and cannot be forged. Private/secret keys must be protected in key repositories.

### Authentication and Integrity

A primary use of certificates is in authentication of digital signatures. Where the user of a certificate trusts the signing CA, that user can then confidently identify the signature of any message received which has been signed by the certificate-holder, and, further, can have confidence that the message has not been tampered with.

### Confidentiality

Certificates also provide a reliable mechanism for obtaining the public key of an intended recipient of data, for the purpose of encrypting it.

NEW IMPROVED  
ARRANGEMENTS FOR  
DIRECT DEBITING ARE  
BEING INTRODUCED  
BY APCA.

## CHANGES TO THE DIRECT DEBIT SYSTEM

APCA has been working with financial institutions and representatives of organisations which use the direct debit system to improve arrangements for automated direct debiting. Direct debiting allows consumers to make regular payments – such as loan repayments, insurance premiums, lease payments and gas and electricity bills – electronically, direct from a nominated account.

At present, a customer wishing to pay recurring amounts by direct debit can arrange to have the payments made automatically by signing a form, called the *Form PD-C*, authorising the recurring amounts to be debited directly to a nominated account at his or her financial institution.

Current arrangements for direct debiting, based on the *Form PD-C*, have been in place for more than two decades. APCA believes that these arrangements need updating to encourage greater consumer acceptance and use of direct debiting. The updating is also intended to improve efficiency at financial institutions.

Under the new arrangements, the *Form PD-C* will be replaced by a *Direct Debit Request* (DDR).

Direct debiting is an efficient and cost effective way of collecting payments. However, the existing system is fairly inflexible and has a number of shortcomings which tend to discourage greater use.

For example, currently the customer cannot specify the amount or frequency of the drawing or put a time limit on the arrangement. Also, the procedures for handling customer complaints are not as well defined as they might be.

Under the new DDR arrangements customers will have the option of specifying the maximum dollar amount to be debited, the frequency of debit drawings and a start and termination date for the authorised debiting.

Market research conducted by APCA shows that only a small percentage of direct debit customers have been involved in a dispute about a direct debit drawing on their account. However, in the interests of promoting greater customer acceptance of direct debiting, the DDR arrangements include new, clearly laid out, procedures for handling customer claims of invalid debiting.

### **Introducing the DDR Arrangements**

A migration plan has been prepared by APCA, which details the steps involved in moving from the *Form PD-C* to the DDR arrangements. The plan specifies that the new DDR will be launched on 15 November 1998. A transition period has been provided for during which both DDRs and PD-Cs may be issued.

APCA is holding a series of seminars to explain the new arrangements to financial institutions and organisations which use the system.

### **Direct Debit Logo**

APCA has adopted a Direct Debit logo which can be used on material which promotes or provides information on direct debit services. The use of the Direct Debit logo is intended to indicate that the organisation concerned is conducting its direct debit arrangements in accordance with APCA requirements.



INCREASING NUMBERS OF ORGANISATIONS ARE USING THE DIRECT DEBIT SYSTEM.

The number of organisations using the direct debit system has grown strongly in the years since APCA took responsibility for the system. As at the beginning of July 1998, there were close to 3,500 direct debit Users recorded in APCA's User Identification database, compared with 953 four years earlier.

**Number of Direct Debit Users\***

January 1994	778	January 1997	2140
July 1994	953	July 1997	2521
January 1995	1062	January 1998	2992
July 1995	1224	July 1998	3468
January 1996	1460		
July 1996	1778		

\* Number of Direct Debit Users registered on APCA's database.

CHEQUE CLEARING PROJECT ON TRACK

**SHORTENING CHEQUE CLEARING**

The project to shorten and standardise the cheque clearing cycle is well advanced. The project involves those members of APCA's paper clearing system which directly clear and settle (Tier 1 members) exchanging cheque and dishonour information electronically, and sets strict time frames for responses from all members of the system.

The Australian Competition and Consumer Commission has approved the Procedures which underpin the project. Most Tier 1 members have now commenced electronic exchanges of cheque information using the new file and record formats. All such members have endorsed an APCA-developed common industry test plan, including common test cases and scripts. The project is scheduled for completion in April 1999.

**HVCS UPDATE**

The SWIFT PDS is now fully operational, with 286,365 payments for a total value of \$1,728 billion being exchanged in June. This represents an average of 13,636 payments per day, for an average value of just over \$6 million per payment.

Membership of the HVCS, and the PDS, is open to institutions which hold exchange settlement accounts at the Reserve Bank. Of the 52 exchange settlement account holders in Australia, 46 were exchanging payments over the PDS, with three more expected to commence sending payments during July.

**RTGS**

After a phasing in period, the Reserve Bank implemented real time gross settlement (RTGS) on 22 June 1998 for payments made over RITS, Austraclear and the SWIFT PDS.