



RESERVE
BANK

O F N E W Z E A L A N D

Austraclear New Zealand System
Report to Members

Year ended 30 June 2007

Reserve Bank of New Zealand
August 2007

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Austraclear New Zealand System

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Introductory remarks

The Austraclear New Zealand System is the only high-value securities depository in New Zealand. The system is charged with providing an efficient and safe process for the transfer and safekeeping of securities.

The Austraclear New Zealand System has been operating in New Zealand since 1990 and is used principally for transferring fixed interest securities, equity securities and cash between participants on a delivery versus payment basis.

The security processing industry, both in New Zealand and globally, has evolved substantially in recent years. Major developments have been:

- **Consolidation.** With mergers of major financial institutions, the larger service providers can settle more trades by internal bookkeeping. Equally there has been consolidation of major depositories in regional blocs reflecting scalability of securities processing infrastructure.
- **Standardisation.** In order to achieve higher levels of processing efficiency and “straight through processing”¹, more markets are adopting international standards which are becoming embedded in operations. While significant up-front investment is required, pay-off is achieved through less manual intervention in trade and post-trade processes and fewer failed trades. While trade flow processing is becoming increasingly standardised, an uncomfortable number of corporate actions remain diverse and require high levels of manual intervention with attendant operational risk.
- **Investment in technology.** Securities processing is often a mission-critical part of national infrastructure. Investment is constantly required to insure against technical obsolescence and to ensure systems remain appropriately supported. Settlement systems interact with various trading, registry, and position keeping systems and the market requires efficiency in design and operation to minimise waste in the form of unnecessary overhead. Equally important is the need to ensure systems have sufficient diversity and business continuity plans are in place and are effective.
- **Trade flows.** Inevitably the life-blood of a depository is the flow of transactions that generate revenue to fund the system’s operations. In recent years as markets have rallied trade volumes have held up, although in New Zealand fixed interest volumes have declined recently. Hopefully changes to the savings regime in New Zealand will provide impetus for higher volume.

All these issues have impacted and continue to impact the Austraclear New Zealand System. The challenge for the Reserve Bank as system operator is to ensure that appropriate investment is made in infrastructure that is a cornerstone of the operation of an open capital market which in turn contributes to financial stability in New Zealand.

Our primary focus at this time is ensuring that the development of the upgraded Austraclear New Zealand System is delivered as planned and the outcome is a system which will be at the heart of settlement for years to come.

¹ “Straight through processing” is the ability to automate the transfer of data so as to allow transactions to be processed without further manual intervention. Automatic transfer of data without re-keying reduces costs and also reduces the possibility that data is re-keyed incorrectly.

While we work on this large project, the Reserve Bank is constantly improving functionality and services. We have also been enriching our interaction with clients. We are aware that as a provider of a mission-critical service, we have a responsibility to ensure that we consult widely and draw on the opinions of members.

In the past we have done this informally, principally via the six monthly User Group meetings and with special meetings for larger members together with a quarterly newsletter. In coming weeks, we will formalise the interaction with members through the creation of a User Advisory Committee.

The challenges ahead for the Austraclear New Zealand System are many and varied. The team at the Reserve Bank looks forward to responding to those challenges.

In reading this Annual Report, we hope readers develop a sense of our desire to deliver an efficient, robust and resilient solution for clients.

Mike Wolyncewicz
Chief Financial Officer
Reserve Bank of New Zealand

System overview

About the Austraclear New Zealand System

The Austraclear New Zealand System provides an efficient electronic means for settlement between members trading securities on a delivery versus payment basis.

For a transaction to be settled, both parties must enter the relevant details of the transaction and those transaction details must be “matched” by the system. Once a transaction is settled it cannot be revoked.

The system is operated by the Reserve Bank of New Zealand (“Reserve Bank”). The Reserve Bank has a licence to operate the system until 2015 and the Reserve Bank’s role is to ensure the system operates in a secure, resilient, robust and efficient manner.

The Reserve Bank’s Financial Services Group (FSG) is responsible for the administration of the “business” aspects of the system. FSG is headed by Mike Wolyncewicz, the Bank’s Chief Financial Officer and day to day business support is provided by the Payments and Settlements Systems Team within FSG that is managed by Adrienne Barlow.

FSG reports on the operation of Austraclear to Dr Don Abel, Assistant Governor and Head of Operations.

FSG has a service level agreement in place with the Bank’s Knowledge Services Group (KSG), that provides technology and operations support for the system. Software support and development services are provided by Datacom Systems (Wellington) Limited and telecommunications services are provided by Telecom Corporation of New Zealand Limited.

All securities beneficially owned by members and lodged into the system are registered in the name of New Zealand Central Securities Depository Limited (NZCSD) which is a wholly-owned subsidiary of the Reserve Bank.

NZCSD operates as a bare trustee and has entered into a deed with the Reserve Bank with NZCSD as a custodian trustee for securities beneficially owned by members of the Austraclear System. The Reserve Bank has accepted liability for any debts or liabilities of NZCSD in the event of a justifiable claim by a third party.

Management commentary

Year Ended 30 June 2007

The operational performance of the system in 2006/07 was sound.

Key performance statistics were:	2007	2006
• System availability (%)	99.99	99.60
• Average daily transactions	1,097	1,123
• Revenue (\$000)	3,572	3,860
• Net Profit (\$000)	834	672
• Customer satisfaction (%) ²	97	n/a

In November 2006, a new interface was launched which allowed members to submit transactions to the Austraclear System via SWIFT. This development enhanced members' ability to use "straight through processing" thereby creating opportunities for increasing efficiency and reducing operational risk. Presently one member is using the Austraclear-SWIFT interface with considerable interest being shown by other members.

The Reserve Bank's focus, however, has been on completing the ESAS³-Austraclear Refresh Project. This project will ensure the system is fully supported until at least 2011 and will also make future system enhancements easier to achieve. This is a large undertaking costing \$4.8 million. Progress has been very satisfactory with the upgraded system made available to members for industry familiarisation testing on 19 June 2007. The system is scheduled to go live in September 2007.

The Reserve Bank has also put in place major changes to the communications network that the system operates over. The Reserve Bank migrated from Telecom's frame relay network to its "One-Office" product in November 2006. Additionally, a new access method that uses the internet has been completed and will go live when the ESAS-Austraclear Refresh Project is launched. This will replace the existing IPNET dial-up service.

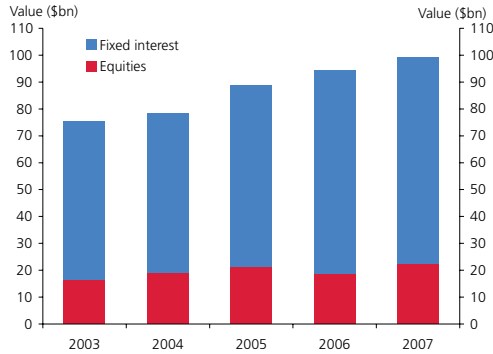
Finally, important governance changes were agreed this year and are currently being implemented. The Austraclear New Zealand System Rules have been amended to establish a User Advisory Committee which will allow members to formally interact with the Reserve Bank to improve the Bank's accountability to members. The Reserve Bank will produce an annual plan and annual report, with members being able to contribute to any decisions affecting the development and operation of the system.

² Customer satisfaction was gauged in February 2007 by surveying Austraclear members across a number of aspects of the services provided. The number reported gives the percentage of members who stated that the services met or exceeded their expectations.

³ ESAS is the Exchange Settlement Account System. That system records transactions on accounts at the Reserve Bank that are maintained by certain financial institutions.

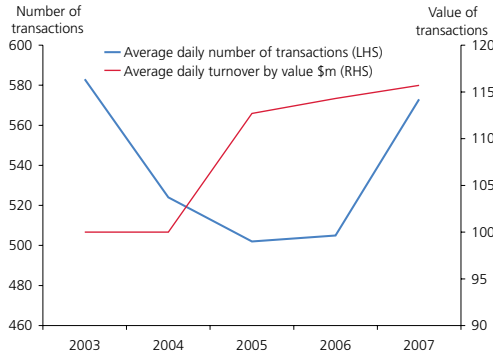
Key statistics

Value of securities in the Austraclear New Zealand System as at 30 June



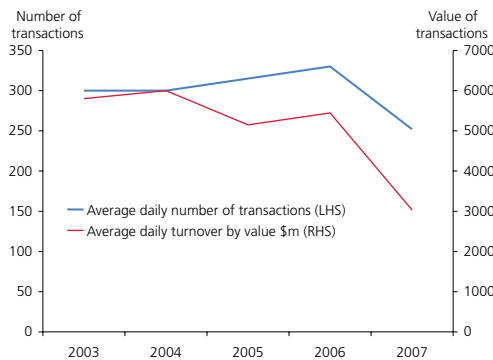
- Value of equities securities has been rising slightly.
- Value of fixed interest securities has grown significantly over the five year period.
- Total value of assets held in the depository as at 30 June 2007 is \$99 billion.

Transactions – equities



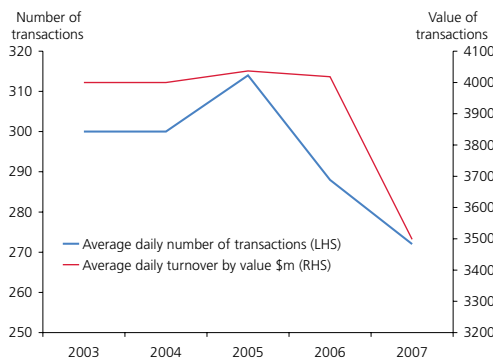
- The average daily volume of equity transactions grew 13% for the year, but the value of equity transactions remained static at \$115 million per day.

Transactions – fixed interest



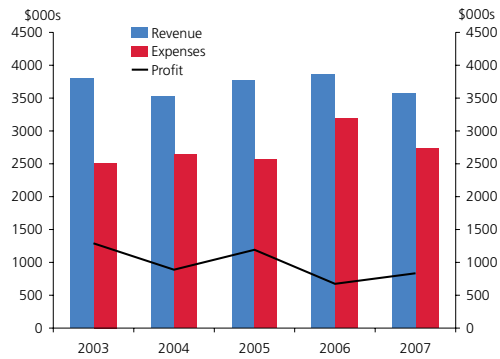
- A substantial decline in both the value and number of fixed interest transactions resulted from changes to the Reserve Bank's regime for managing aggregate liquidity in the banking system. Average transaction volumes were 252 per day (down from 330) and average value declined from \$5.4 billion per day to \$3.0 billion per day.

Transactions – cash



- Reductions occurred in both the value and volume of cash transactions.

Financial performance



- Revenue declined by 7.5% in 2007.
- Aggregate fees paid by members (which is revenue for the system operator) has consistently been around \$3.5-\$3.8 million over the five year period.
- Costs declined year-on-year because preliminary costs related to the upgrade project were written off in 2006. Also, the reduction in costs in 2007 is partly attributable to capitalisation of staff time devoted to the refresh project.
- Profit was \$0.834m (2006: \$0.672m).

Member numbers as at 30 June

	2003	2004	2005	2006	2007
Full	72	63	56	56	56
Associate	61	67	57	47	49
Nominated trust	97	96	87	81	77
	230	226	200	184	182

- Overall member numbers have remained relatively static in the last year after several years of industry consolidation.

System outages year ended 30 June (minutes)

	2003	2004	2005	2006	2007
Application	0	282	0	0	0
Connectivity	105	0	1100	462	10
	105	282	1100	462	10

- Downtime has continued to be minimal and the system enjoys very high levels of availability.

Customer satisfaction (percentage)

	2007
Exceed expectations	32
Meet expectations	65
Does not meet expectations	3
	100

- The February 2007 customer survey revealed high levels of customer satisfaction with the operation of the system.

Risk management

The internal controls of the Austraclear System are audited each quarter by PricewaterhouseCoopers (PwC) who act on behalf of the Reserve Bank's external auditor (the Auditor-General). PwC's quarterly audit opinion is published on the Reserve Bank's website. The quarterly audit report is addressed to the Governor of the Reserve Bank and is reviewed by the Bank's Audit Committee, with external auditors, Reserve Bank Governors and management in attendance.

The Austraclear System is also subject to internal audit by the Reserve Bank's Audit Services division.

Good risk management is at the heart of high value financial operations. In particular, it is vital that high quality business continuity procedures are in place and regularly tested.

The Reserve Bank has a local business continuity site in the Wellington central business district. This provides a site for alternative location of staff in the event of an emergency impacting the Reserve Bank's main premises in Wellington. While a second computer site is located in Auckland and is used alternately with the Wellington processor for live production, the Bank is still developing a long term plan to provide ongoing continuity of business operations as distinct from system operations in the event of a major regional catastrophe that renders all the Wellington-based Austraclear business staff unavailable.

During 2007/08, the Reserve Bank's primary risk management focus will be on ensuring a smooth and successful transition to the refreshed application. A series of quality assurance reports have been provided by Deloitte Touche Tohmatsu who will also report on implementation readiness.

Additionally, the Reserve Bank's plan for 2007/08 includes provision for system enhancements to be made post go live of the refreshed application. In particular, the Reserve Bank will automate the "lodge and uplift" process and reduce the extent of manual intervention in the handling of corporate actions.⁴ Both these initiatives will increase processing accuracy and reduce operational risk.

⁴ A corporate action is an event initiated by an issuer that affects the securities. Examples of corporate actions are a coupon payment (for debt securities) and a dividend (for equity securities).

Financial performance

Total fee revenue for 2006/07 at \$3,572,000 was 7.5% below the fee revenue of \$3,860,000 for 2005/06. This was mainly due to a fall in transaction revenue from fixed interest transactions of \$350,000 offset by an increase in income from equities transactions of \$125,000.

For the first time, transaction fees from equities exceeded those derived from fixed interest transactions. Equities transactions generated 52% of transaction fee revenue (2005/06: 42%) and fixed interest transactions 42% (2005/06: 53%). The reduction in fixed interest fee revenue is largely due to changes made in 2006/07 to the way aggregate banking system liquidity is managed.

As indicated to members prior to the upgrade proceeding, transaction fees will increase in 2007/08 to recover the additional depreciation expense incurred once the refreshed system is implemented. Transaction fees will increase with a surcharge of 26% being applied for four years. This surcharge will be removed once the additional capital expenditure has been fully depreciated.

A short-form Statement of Financial Performance for the Austraclear New Zealand business is:

	2007	2006
	<u>\$000</u>	<u>\$000</u>
Revenue	3,572	3,860
Expenses	<u>2,738</u>	<u>3,188</u>
Net profit	834	672

The Austraclear New Zealand business is operated as a division of the Reserve Bank. The above figures are extracted from the Reserve Bank's audited financial statements, but the accounts of this division have not been subject to a separate external audit. Income and expenditure for the Austraclear New Zealand business is calculated with the accounting policies specified in the Reserve Bank's financial statements.

The Austraclear New Zealand business is attributed costs by the Reserve Bank. This includes charges for use of the Reserve Bank's resources, such as staff, occupancy, internal audit, governance, accounting and information technology. Indirect operating costs incurred by the Bank are allocated to the Austraclear New Zealand System based on predetermined cost drivers and related activity or usage.

Plan for 2007/08

Austraclear New Zealand System Plan for the Year Ended 30 June 2008

The major initiatives and performance goals for the year include:

- Establishment of a User Advisory Committee
- Successful completion of the ESAS-Austraclear Refresh Project
- Successful roll-out of a new telecommunications network
- Implementation of straight-through processing for most lodges and uplifts
- Implementation of greater automation of corporate action processing (including Approved Issuer Levy processing)
- Applying for designation of the Austraclear New Zealand System under part 5C of the Reserve Bank Act 1989

Operationally, the following objectives are proposed:

- Have the system available for members for at least 99.5% of core business hours
- Achieve a surplus of \$0.8 million on revenue of \$4.0 million
- Produce a quarterly newsletter with enhanced content
- Survey members' satisfaction levels and report back to members by May 2008

Establishment of a User Advisory Committee

The Bank consulted and received positive feedback from members regarding the establishment of a User Advisory Committee. Rule changes formalising the Committee were promulgated in July 2007 and the first meeting will be held in September 2007. The Bank will provide secretarial support to the Committee.

At this stage we envisage the Committee will meet each quarter (the Chair will determine if this is by way of teleconference or a meeting in person, although we expect the initial meetings will be in person).

Successful completion of the ESAS-Austraclear Refresh Project

The ESAS-Austraclear Refresh Project is scheduled to go live on 10 September 2007. This has been a major project and while development is substantially completed, careful implementation management will be required given the mission-critical nature of the applications.

Successful completion will be a function of the system being implemented on time, to budget, to the standards of performance and integrity required, with proper facilitation of members' transition.

Successful roll-out of a new telecommunications network

Telecom has notified us that from December 2007 it will no longer provide the IPNet (dial-up) service to access the Austraclear system. Also, the Sydney Futures Exchange's ANNI network will no longer be able to be used to access the Austraclear New Zealand system. The Bank has therefore implemented a new internet-based access to replace these access methods (in addition to the router based access for larger members). This new service is being tested at the same time as the refreshed application and will be rolled out to members in conjunction with it.

Improve communications

The Reserve Bank currently publishes a quarterly newsletter for Austraclear members known as the *RTGS Bulletin*. We will continue to publish the newsletter and include additional systems statistics and reports on performance. We plan to enhance the commentary on current issues for settlements and give more tips and reminders about key matters.

We will continue to hold the six-monthly user group meetings alternately in Auckland and Wellington and to also continue bilateral meetings with members. We would like to receive feedback from members as to when they believe the User Advisory Committee and User Group meetings could be scheduled.

Implementation of straight-through processing for most lodges and uplifts

The Bank has made limited changes to the Austraclear application while the application refresh project has been under way. One initiative we did undertake was to develop a SWIFT interface into Austraclear so members could achieve a high degree of straight-through processing of their transactional business. We will continue to encourage members to use the new interface.

Once the refreshed application is live we will have resources to provide functional enhancements. The major areas of high manual intervention and high operational risk are in the areas of lodges and uplifts and also processing of corporate actions.

In the case of lodges and uplifts members and the Reserve Bank manually process about 200 transactions per day.

Our intention is to automate these processes as best we can by developing better system access for members and interfaces between systems.

We will present business cases for these developments to the User Advisory Committee and solicit input before committing to those developments.

We will assemble a list of other less significant enhancements and again consult with members on the relative priority of items on that list.

Our goal is to complete new interfaces for lodges and uplifts and corporate actions before 30 June 2008.

Apply for designation of the system under part 5C of the Reserve Bank Act 1989

The ESAS system is a designated payment system, but Austraclear is not. The Bank as system operator intends applying for designation of the system. The benefit of designation is that it confers on a system statutory finality of settlement.⁵ The application will cost \$15,000 with no ongoing costs. Some Rule changes will be required in order to achieve designated status and members will be consulted on these.

Operational plans

Have the system available for members for at least 99.5% of core business hours

The Austraclear System is a mission-critical part of the national economic infrastructure. Our target is to achieve at least 99.5% system availability during core business hours and we have consistently met or exceeded this target. We will report back to members on actual systems performance and any issues arising.

Achieve a surplus of \$0.8 million on revenue of \$4.0 million

There will be a material change to the cost profile of the operation when the ESAS-Austraclear Refresh Project goes live. Depreciation costs will increase by \$0.7m per annum and, as confirmed at the time we consulted with members on the refresh project, the additional depreciation will be recovered over a four year period. This translates into a 26% per annum increase in transaction fees for that four year period, after which fees will revert back to normal levels (ie excluding the additional depreciation which will have been recovered). A revised fee tariff reflecting the surcharge has been confirmed.

Over the years the nominal amount of fees paid by members has remained relatively unchanged with about 1,100 transactions flowing through the system each day, which largely reflects static average daily volumes passing through the system.

Financial outcomes will largely depend on the transaction volumes generated.

Survey members' satisfaction levels and report back to members by May 2008

We conducted a survey of members in February 2007. We intend to now make this an annual process designed to solicit high quality detailed feedback with a view to improving performance.

We also plan to have regular dialogue with registries with a view to improving processes and performance.

⁵ See the following publication on the Bank's website www.rbnz.govt.nz : Application for Designation as a Designated Payment System: Information for applicants for designation under Part 5C of the Reserve Bank of New Zealand Act 1989 June 2004.