Country Focus
NEW ZEALAND

Over a thousand years ago, Maori became the first people to migrate to New Zealand. Though a Dutchman, Abel Tasman, was the first recorded European to sight the land, it was the British who colonised New Zealand, leaving an indelible mark on the country and its people. Since then, people have come from around the world to settle here.

New Zealand has a population of approximately 3.8 million people. The official languages are English and Maori. The people are known as Kiwis, which is also the National bird of New Zealand. New Zealand is historically known for its sheep, rugby ("The All Blacks") and its diverse scenic beauty and outdoor activities, New Zealand of today continues those traditions but is also a sophisticated, technologically advanced and multicultural society.

New Zealand is an island nation situated in the South Pacific, which is made up of North Island, South Island, Stewart Island and various small islands surrounding. It spans 1600 km from north to south and is approximately 2250 km east of Australia. New Zealand is also known as Aotearoa, "Land of the Long White Cloud", and more recently noted as the home of Tolkien's Lord of the Rings Middle Earth.

The Audit Office

The Controller and Auditor-General is an Officer of Parliament, and a corporation sole established by section 10 (1) of the Public Audit Act 2001. To plan, conduct and report on the results of over 3,900 audits each year, the Controller and Auditor-General has three major sources of assistance: two internal business units (the Office of the Auditor-General and Audit New Zealand) and private sector auditing firms.

"The Audit Office" is the term used to refer to the whole of these resources and activities. It includes the Controller and Auditor-General as a person, and all those authorised by the Controller and Auditor-General to carry out any particular function, duty or power.

These organisational arrangements are depicted in the diagram opposite :

The roles of the two internal business units are as follows:

- The Office of the Auditor-General (OAG), Te Mana Arotake, which is responsible for strategic audit planning, setting standards, determining who will undertake audits, overseeing auditor performance, carrying out performance audits and special studies, and parliamentary reporting and advice.

- Audit New Zealand, Te Tari Arotake o te Motu, which is responsible for performing audits that it has won the right to conduct on behalf of the Auditor-General in competition with private sector auditors, as well as those audits not awarded under the contestable audit arrangements, and offers additional assurance services to public entities. Though Audit New Zealand operates in a contestable environment and competes with private sector firms, Audit New Zealand is still New Zealand's largest provider of audit and assurance services to the public sector. Currently, Audit New Zealand has 8 offices and over 200 staff.

Audit New Zealand's use of technology

As with most modern organisations, technology is a critical component of the business.

All audit and assurance staff members are mobile, that is they have their own laptop for remote or local connection to our Network. Audit New Zealand uses the Microsoft© Office suite of programmes and Lotus Notes© as the base for our communication and information sharing via email and online databases, such as Audit New Zealand's audit manual.

The two main tools supporting the audit process are electronic working paper software, and where appropriate, data interrogation Computer Assisted Audit Tools (CAATS).

Electronic working papers

Audit New Zealand uses TeamMate2000© version SP2a, which is a windows based electronic working paper system. Its implementation has brought efficiencies to the workpaper documentation, reporting and review process. TeamMate converts all aspects of the audit file (preparation, review, report generation and storage) into an electronic format, making audit files accessible to multiple users in diverse locations.

TeamMate is methodology neutral and does not force change upon our audit approach.

TeamMate implementation was approved in September 2000 and went live in mid-November 2000. This included a number of standard Library files for each of the client sectors and populated a number of "Teamstores" with pre-written audit programmes and management letter points. This provided efficiencies in that audit teams had a standardised "start point" for their specific audits which they were able to customise for their particular auditee risks and issues. In addition the roll-out of TeamMate has allowed standardisation of hardware, software and standards across Audit New Zealand. The benefits of this are significant.

In November 2001 Audit New Zealand implemented an upgrade, TeamMate 2000 version SP2a. The enhanced functionality within the new version will assist our sector experts to review the issues arising across the public sector to determine common issues. We are in the process of developing the processes to utilise and benefit from the latest version.

Computer Assisted Audit Tools

The use of CAATS for data interrogation and analysis is an area that we are focusing upon as ways to work smarter. Where a need has been identified CAATS are used, such as:

- Statistical Analysis System (SAS©) software is used to interrogate and report from auditee provided data, this is mainly for one key auditee.
- Audit staff have access to some auditee applications to interrogate data.
- Where auditee's use SAP© software, our auditors are building their skills in the use of the reporting functionality provided by SAP©.
- There is limited use of data analysis software, IDEA©, for review of auditee data.

Integration of IT and Non-IT Audit

Background

Audit New Zealand has undergone tremendous changes over the years, during which time IS audit methodologies, techniques and resources have come and gone. More recently there has been a track record of a lack of buy-in to an integrated IS Audit approach, poor resourcing, and unresponsiveness to OAG performance indicators regarding IS capabilities. To address this, and inline with other initiatives, Audit New Zealand has recently changed its IS Audit approach and enhanced its IS capabilities.

The IS Audit approach in the past has been based on a review of general controls to provide audit teams with assurance that key IT risks are being managed. Though this is a common approach it tended to be taken as a blanket assurance that any computer systems could be relied on, and covered both organisational and audit risk. As such, the general controls review was seen as adding little value, a bolt-on, not integrated, and having minimal impact on the attest audit approach.

IS capabilities

Significant enhancements have been made to organisational and audit IS capabilities during the last two years. During the next two years, further improvements will be achieved through the employment of additional IS Audit specialists and the empowerment of the attest (non-IT) audit staff. We are currently in the process of rolling out a training programme across all our offices. The programme includes training in IT risk awareness and our IS Audit approach and IS audit techniques.

Audit New Zealand also participates in exchange programmes and, where possible, uses this experience to share knowledge, and benchmark and improve our IS Audit approach and techniques.

IS Audit approach

Audit New Zealand's audit approach focuses on risk - both organisational (business) risk and system (audit) risk. The revised IS Audit approach complements this, by firstly, assessing organisational risk at a high level so that a considered approach can be taken to determining the most appropriate audit response.

The areas directly related to system risk (security and change control and system interfaces) are now addressed as an integral part of the audit programmes for the relevant areas of the audit, such as expenditure and payroll. In addition to the traditional financial systems our IS Audit approach includes the assessment of risks surrounding the auditee's core business systems, performance reporting system, and any high-risk IT system or processes. Assessment of the system risks is completed as part of interim audit work.

Our IS Audit approach consists of the following stages, split between Organisational and System Risk.

Information gathering

As part of audit planning information is gathered to understand the auditee's IT environment, key systems, and areas of potential risk focus.

Preliminary organisational risk assessment ("PORA")

In addition, as part of the audit planning a high-level assessment of organisational risks is performed. The PORA includes organisation risks related to IT Governance and Strategic Planning, System Acquisition, Capability and Capacity Planning, Project Management, Operations (including Outsourcing), Contingency Planning, Policies and Procedures.

High-level review of organisational risk areas

During the audit planning or the interim audit, areas of high risk identified during the PORA are subjected to a more detailed review.

Review of systems

The assessment and review of system-related IT risks are undertaken as part of the interim or final audit. Our approach extends the risk and controls being tested to include aspects of Information Security Management, Change Control, and Interfaces. The objective is to ascertain if adequate controls have been built into the system and are maintained so that reliance can be placed on business processes, the application systems used, and the interfaces between systems.

We consider that it is critical that the audit process includes a review of the core business system(s) that the auditee depends upon. Often, the core business system will feed the financial and performance reporting systems that we place reliance upon.

Our approach includes:

- The identification of business processes and systems that are to be relied on;
- The identification of critical interfaces where assurance over the accuracy and completeness of data being transferred is required;
- Determination of high-risk functions and/or sensitive data, in terms of the business process;
- The identification of at-risk system master data (e.g. master files, tables) and/or programs (e.g. calculations, spreadsheet formulae);
- Review, including risk assessment and testing, of access and change control procedures related to the system being relied on;
- Review, including risk assessment and testing, of controls over data file transfer processes related to the interface(s) being relied on;
- Review, including testing, of access controls at the general/network level. This should be done once and will provide assurance, at that level, for all systems.

Performance of the IS Audit

The level of work and who performs the work required varies with each auditee. With the exception of small auditee's with minimal IT, the core principles for all auditee's are:

- For significant and key auditee's the information gathering, preliminary organisational risk assessment and high-level review of organisational risk areas are conducted by the IS Audit specialist. For smaller auditee's this is performed by the Auditors, with Support and Quality Assurance provided by an IS Audit specialist.
- Attest Auditors conduct the review of auditee Financial Management Information Systems and performance reporting systems. Support and Quality Assurance is provided by an IS Audit specialist.
- The IS Audit specialist conducts the review of the auditee's core business systems and high-risk IT systems or processes.

Future Challenges

Any change process includes significant challenges. For Audit New Zealand's IS Audit approach, the key challenges over the coming 1-2 years are:

- Successful integration of the two disciplines, IT and Non-IT audit
- Continued buy-in and support
- Improved awareness of IT risks and the linkage to business and audit risks
- Improving staff skills, and continued development of supporting tools and techniques

About the Authors

Shaun McHale is a Director in the Specialist Assurance Services (SAS) Group of Audit New Zealand.

Shaun joined Audit New Zealand in 1998 and has led the development of a wide range of assurance services. Shaun emigrated from the UK where he was a Senior VFM specialist with the Audit Commission. Prior to that he was a manager in Local Government based in London.

Shaun can be contacted by email shaun.mchale@auditnz.govt.nz or phone (64) 4 496 3149.

Jim Obren is a Manager in the Specialist Assurance Services Group of Audit New Zealand and responsible for information systems audit and assurance.

Jim joined Audit New Zealand in May 2002 to take up the challenging role of helping Audit New Zealand be the best Audit and Assurance service provider in the New Zealand public sector. Before Joining Audit New Zealand Jim held national and international roles for organisations such the National Bank of New Zealand, Sumitomo Mitsui Banking Corporation (UK), Barclays Capital (UK), KPMG, Westpac Banking Corporation, and Databank Systems Limited (now EDS NZ Ltd).

Jim can be contacted by email jim.obren@auditnz.govt.nz or phone (64) 4 496 3111.