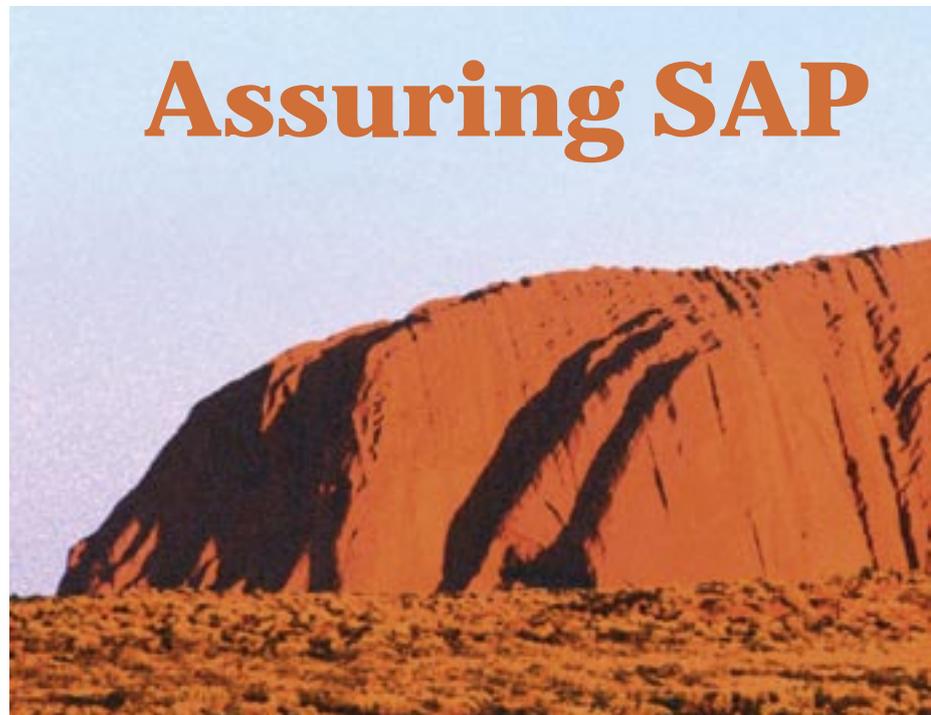




AUSTRALIA

Enterprise resource planning and related applications software from SAP has been implemented by many Australian Government bodies as the basis of their financial and human resources management systems. Amy Fox and Lesa Craswell from the Australian National Audit Office (ANAO), chart the development of ANAO's audit of SAP and in particular its use of specialised audit software, SAP Assure. There have been a variety of significant benefits from the use of SAP Assure and the ANAO has achieved a much greater level of assurance about the controls in client systems.



Assuring SAP

Organisation Background

In Australia the Office of the Auditor-General was established in 1901 under the authority of the *Audit Act 1901*, the fourth act to be passed by the first assembly of the Commonwealth of Australia Parliament.

In 1997 the *Auditor-General Act 1997* replaced the Audit Act, and was enacted on 1 January 1998. Under this Act the independence and mandate of the Australian National Audit Office (ANAO) was further strengthened, as the Auditor-General had become an 'Officer of the Parliament'.

Information Technology Audit (IT Audit) exists to provide an integrated audit support service to all business units within the ANAO. While administratively part of the Assurance Audit group, they have primary responsibility for the management and delivery of IT audit activities to both the Assurance (Financial) and Performance Audit service groups. The primary objective for IT Audit is provision of independent assurance through the detection and evaluation of risks faced by Australian Government entities in their adoption and use of existing and emerging technologies.

There are currently 23 permanent members of IT Audit supplemented by contract staff, each with a range of educational and technical skills and experiences. The variety of technology, accounting, auditing, and graduate backgrounds provides a diverse team capable of successfully undertaking most of the audit activities with which it is charged.

One of the services offered by IT Audit is the provision of IT application control assessment of the various SAP environments within audit clients. SAP is a key area of review for the ANAO as it has

been implemented by multiple Australian Government entities for use as their financial management and/or human resource management systems. The purpose of our review is to undertake risk identification, risk assessment, control identification and control assessment of entities' SAP implementations. This contributes a significant level of assurance for the financial statement audits undertaken by the ANAO.

Development of SAP Audit Approach

The ANAO developed and published a SAP Better Practice Guide¹ in 1998. This guide was prepared to provide assistance to Australian Government entities to ensure that security and internal control considerations (in the form of better practice procedures) within their SAP systems were configured and implemented correctly. The guide was updated and expanded on in 2004.

Until 2005 the ANAO's approach to auditing SAP was through the use of manual work programmes. These programmes were developed internally over a long period of time but were resource intensive to complete. Our approach also imposed significantly on the staff at the audit client, and did not appropriately consider differences in SAP versions, audit client business processes, and/or SAP customisations. In addition, our audit scope and coverage was primarily limited to the BASIS module in SAP, specifically related to security role allocation and administration. To support our audit process, the ANAO relied heavily on consultants and contractors to provide specialist SAP knowledge and training.

¹ Better Practice Guides can be downloaded from the Publications section of the ANAO's website: <http://www.anao.gov.au>



In the later part of 2004 the ANAO became aware of a consulting firm who had developed a software tool, called SAP Assure². This tool, in part, automated the audit of SAP. The capabilities of this software went significantly beyond the audit coverage and the capability of the ANAO's manual programmes, and extended audit analysis into areas such as SAP configuration controls, audit client manual and business process controls, and control risk assessments. Importantly, the software was able to undertake this analysis via 'read-only' access to the audit client's SAP environment, and was capable of customisation and configuration to cater for the different environments we were required to audit.

A decision was made to pilot SAP Assure after a desktop review of several comparable products. The review panel consisted of both IT and Assurance Audit specialists, and considered factors such as usability, access requirements, cost, functionality, and ongoing training needs. In late 2004 the ANAO undertook a live pilot assessment of the tool at the then Department of Transport and Regional Services.³ The pilot was a combined effort with the product vendor and included involvement from a range of ANAO staff including IT and Assurance Audit personnel.

The outcomes of the pilot were successful and positive. The pilot team realised immediate audit benefits in terms of improved audit coverage, efficiency, automation of reporting, and focussed recommendations for configuration and security improvements. But they also identified considerable ongoing benefits that could be gained by the ANAO in using the tool as part of our audit coverage. Consequently, a business case was developed and subsequently approved to implement the tool progressively across our SAP audit clients.

The rollout of SAP Assure was internally phased across a number of key audit clients. Our implementation used an integrated approach between the IT and Assurance auditors, supported by both the IT and Assurance Audit executives as well as audit client management. A programme of technical training was provided to IT Audit staff, with additional process training being provided to Assurance Audit staff. Staff champions were designated for the tool and provided a direct feedback loop from audit staff to the vendor regarding implementation or operational issues, and recommendations for possible improvements. These activities contributed greatly to the overall success of the implementation.

Analysis Undertaken

There are three modules to the SAP Assure tool:

- Security;
- Configuration; and
- Data integrity and analysis.

Using SAP Assure as part of our audit approach presents considerable opportunity for audit clients to be active participants in the audit process. The clients provide background information for module configuration as well as information on their business processes supported by SAP. In addition to system controls and processes, SAP Assure allows manual processes to be considered as part of the overall audit risk and control assessment. This ensures a holistic view of all processes and configurations can be taken into account by the audit team.

Module	Key Functions
Controls	<ul style="list-style-type: none"> ● Provides a comprehensive assessment of controls within an SAP R/3 environment. ● Inbuilt knowledgebase of controls which your environment is assessed against. ● Automatically identifies and reports internal control weaknesses. ● Facilitates an integrated audit. ● Assists with the ongoing monitoring of key SAP controls.
Security	<ul style="list-style-type: none"> ● Inbuilt knowledgebase of SAP transactions and segregation of duties points. ● Provides proactive review of segregation of duties. ● Assesses security within all SAP processes. ● Assists with the ongoing monitoring of SAP access.
Integrity	<ul style="list-style-type: none"> ● Identifies integrity risks. ● Enables assessment against preset tolerances. ● Automatically identifies duplicate and potential fraudulent transactions, and financial statement disclosure concerns. ● Assist with assessing the integrity of master data.

² The supplier of the software is now Protiviti Independent Risk Consulting. More details at: www.protiviti.com.au/portal/site/pro-au/menuitem.422c12144c9aeeef4ca19f110f5ffbfa0/

³ Now Department of Infrastructure, Transport, Regional Development and Local Government

Benchmarking and continuous monitoring ensure that subsequent reviews are more efficient. Benchmarking allows for the comparison of prior year results against the current settings and allowing any changes and issue remediation to be identified very quickly. This feature enables prior year results to be fed into the risk assessment process for the current year's audit.

The Challenges

As with any software tool, in addition to licensing fees, there are ongoing costs associated with training and maintaining the knowledge of staff. There were also initial costs and challenges involved in the ANAO's implementation of SAP Assure. These included:

- Purchase of the product;
- Initial training;
- Greater understanding required of audit areas not previously reviewed;
- Risks identified impacting the overall audit approach; and
- Ensuring support from audit managers and audit clients.

The complexity of the SAP environment and the ability of the tool to reflect this also presented some additional challenges, including:

- Interpretation of results (determining whether a particular setting was appropriate or not based on audit risk and control assessments);
- Variances of configuration between audit clients (as each client has different business requirements and processes);
- Audit clients unaware of particular settings (they had been set during the original implementation of SAP using the standard Australian Government template and never subsequently reviewed/updated);
- Differences between the initial configuration of the tool (which had a standard setup for industry and private sector use) and the configuration of the SAP environments under review by the ANAO (requiring additional software setup and customisation for government use);

- Maintaining and assuring security of audit client data; and
- Turnover of key ANAO staff members initially involved in the pilot and introductory training (this has subsequently been addressed and now the majority of ANAO IT Audit staff are trained in the use the tool).

The Benefits

A number of the ANAO's audit clients viewed the introduction of SAP Assure software as a business improvement opportunity. They were keen to obtain access to the audit results in order to assess internally how they could better configure SAP to meet their entity's needs. Some have subsequently purchased the tool for their own use. In contrast, a small number of audit clients were not enthusiastic with the additional level of scrutiny and identification of risks provided by the tool.

There have been a variety of significant initial and ongoing benefits achieved by the ANAO as a result of the rollout of SAP Assure. These include:

- Greater coverage for audit risk and control assurance across the SAP environments (we are now capable of reviewing configuration and security across all SAP modules, not just BASIS);
- Increased efficiency in the second year of implementation (review of SAP was more efficient in the second year across all audit clients);
- Identification of business improvement opportunities for audit clients;
- A standardised approach to reviewing SAP across a diverse audit client base (individual configurations differ widely, however the overall audit approach is now consistent); and
- A much greater level of assurance achieved where audit clients now have strong controls (and those with weaker controls are able to identify and remediate to improve their controls).

Key Improvement Opportunities

With the assistance of SAP Assure the ANAO has been able to identify and recommend a significant number of improvements to both the configuration

and security management of SAP across a large number of Australian Government entities. These recommendations are centred on the general themes of:

- Incompatible duties and ensuring an appropriate level of system enforcement of segregation of duties between key financial transactions (for example, transaction creation and transaction approval);
- Rationalisation of the number of users with access to functions and transactions considered by the ANAO as sensitive;
- Rationalisation of the number of users with high level administration access (for example, SAP*);
- A lack of setting and enforcement within configuration items of organisational and/or accounting policy (for example, asset useful life settings in SAP differing to that required by accounting policy); and
- Key system messages not being set, or being set as warnings instead of fatal error messages.

The Future of SAP Assurance within the ANAO

Many Australian Government entities have moved, or are preparing to move, to SAP ECC6 during the 2007-09 financial years. Within the ANAO there are internal processes underway to ensure that SAP Assure is able to continue to meet our ongoing needs in this changing environment. As part of this the ANAO has successfully undertaken a second pilot implementation of SAP Assure on a new audit client implementation of SAP ECC6. The aim of this pilot was to observe the SAP ECC6 implementation process, identify issues the tool needed to address to continue performing, to provide important staff development and learning opportunities, and provide the audit client with an opportunity for business process improvement.

The ANAO is currently in the process of updating its SAP Better Practice Guide to reflect changes to the SAP System environment and new functionality since the original guides were released. The new guide is expected to be completed by March 2009.



Lesla Craswell

Director at the Australian National Audit Office (ANAO) in Canberra Australia. Lesa has previously been a member of the local board of the Canberra Information Systems Audit & Control Association Chapter and has over ten years IT experience in Australian Government. lesa.craswell@anao.gov.au



Amy Fox

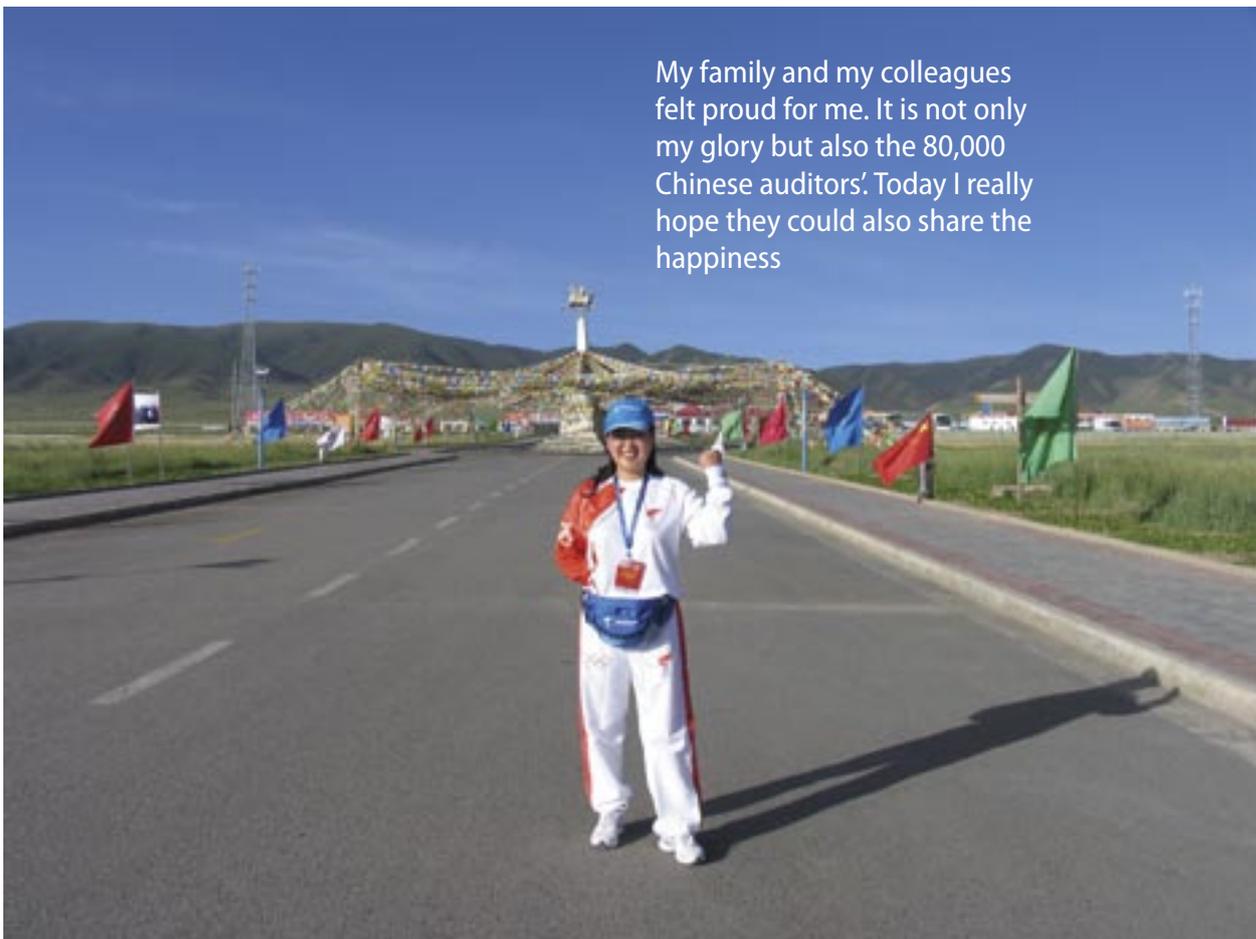
Senior Director at the Australian National Audit Office (ANAO) in Canberra Australia. Amy has previously been a member of the local board of the Canberra Information Systems Audit & Control Association Chapter, is a Certified Information Systems Auditor and a Chartered Accountant. amy.fox@anao.gov.au

My Olympic torch relay

International Olympic Day is celebrated on 23 June. On that day in 2008, 162 torch bearers took part in the torch relay of the Beijing Olympics beside the beautiful Qinghai Lake in Qinghai Province, the northwest of China. Ms. Yang Li, who is Deputy Director of IT Audit Center with the National Audit Office of the People's Republic of China, was the 121th leg among them.

After the torch relay, Yang was interviewed by the interpreter from The Official Website of the Beijing 2008 Olympic Games by telephone.

"I had never thought that I could connect with the Olympic Games so near. Before last National Day, I thought the Olympic Games were only related with the athletes and the champions. After I was selected as the Torch Bearer organized by Lenovo last October, I was extremely pleased. My family and my colleagues felt proud for me. It is not only my glory but also the 80,000 Chinese auditors'. Today I really hope they could also share the happiness." Yang Li said.



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